



# THE UNIVERSITY *of* EDINBURGH

This thesis has been submitted in fulfilment of the requirements for a postgraduate degree (e.g. PhD, MPhil, DClinPsychol) at the University of Edinburgh. Please note the following terms and conditions of use:

This work is protected by copyright and other intellectual property rights, which are retained by the thesis author, unless otherwise stated.

A copy can be downloaded for personal non-commercial research or study, without prior permission or charge.

This thesis cannot be reproduced or quoted extensively from without first obtaining permission in writing from the author.

The content must not be changed in any way or sold commercially in any format or medium without the formal permission of the author.

When referring to this work, full bibliographic details including the author, title, awarding institution and date of the thesis must be given.

# ARABIC DISLOCATION

Ali A. Alzayid



A thesis submitted in fulfilment of requirements for the degree of

DOCTOR OF PHILOSOPHY

to Linguistics and English Language

School of Philosophy, Psychology and Language Sciences

UNIVERSITY *of* EDINBURGH

2020

Supervisors: Prof. Caroline Heycock & Prof. Peter Ackema

Internal examiner: Prof. Bettelou Los

University of Edinburgh

External examiner: Dr. Dora Alexopoulou

University of Cambridge

# Declaration

I, Ali Alzayid, declare that this thesis has been composed solely by myself and that it has not been submitted, in whole or in part, in any previous application for a degree. Except where stated otherwise by reference or acknowledgement, the work presented is entirely mine.

# Abbreviations

1	first person
2	second person
3	third person
ACC	accusative
ATB	across-the-board
AgroP	object agreement phrase
A-position	argument position
A'-position	non-argument position
AA	agreement affixes
AB	Aoun and Benmamoun
AP	articulatory-perceptual
BAC	bound anaphora condition
CLLD	clitic left dislocation
CLLD I	clitic left dislocation I
CLLD II	clitic left dislocation II
CLRD	clitic right dislocation
CLRD I	clitic right dislocation I
CLRD II	clitic right dislocation II
CT	contrastive topic
CF	contrastive focus
CI	conceptual-intentional
C	complementizer
CL	clitic
CLD	contrastive left dislocation
CIP	clitic phrase
CD	clitic doubling
CP	complementizer phrase
CSC	coordinate structure constraint
dXP	dislocated phrase

DP	determiner phrase
DS	Dobrovie-Sorin
DAT	dative
E	ellipsis
FUT	future tense
FF	fronting focus
F	focus
F	feminine
GLD	German left dislocation
GM	Guilliot and Malkawi
GEN	genitive
HTLD	hanging topic left dislocation
IO	indirect object
IP	inflectional phrase
IND	indefinite
INF	infinitive
IS	information structure
JA	Jordanian Arabic
LF	logical form
LD	left dislocation
LCA	linear correspondence axiom
LA	Lebanese Arabic
LiA	Libyan Arabic
MOD	mood
MSA	modern standard Arabic
MADA	move and delete approach
M	masculine
MG	modern Greek
NOM	nominative
NEG	negative marker
NP	noun phrase
OVS	object-verb-subject
OSV	object-subject-verb
OBJ	object
PG	parasitic gap
PST	past tense
PP	prepositional phrase

PRT	particle
PL	plural
PA	pronominal affixes
PERF	perfect
PAST	past tense
PF	phonetic form
P	phrase
Q	question marker
QP	quantifier phrase
QUD	question under discussion
RP	resumptive pronoun
SVO	subject-verb-object
SPEC	specifier
TP	tense phrase
TOP	topic
VP	verb phrase
$\theta$ -role	theta-role
WCO	weak crossover

# Contents

<b>1</b>	<b>Introduction</b>	<b>11</b>
1.1	Three questions . . . . .	11
1.2	The language under investigation . . . . .	12
1.3	Outline . . . . .	12
<b>2</b>	<b>Dislocation and Clitic Resumption in MSA : A New Taxonomy</b>	<b>15</b>
2.1	Introduction . . . . .	15
2.2	Word order and Information Structure . . . . .	16
2.3	Left Dislocation . . . . .	21
2.3.1	Hanging Topic vs. Clitic Left Dislocation . . . . .	23
2.3.2	The current status of Arabic: CLLD vs. HTLD . . . . .	28
2.3.2.1	Aoun and Benmamaoun 1998 . . . . .	28
2.4	Right Dislocation . . . . .	31
2.4.1	Clitic Right Dislocation . . . . .	31
2.4.2	CLRD in Arabic . . . . .	33
2.5	Clitic Configurations in Arabic: a new taxonomy . . . . .	36
2.5.1	Terminological note . . . . .	37
2.5.2	Justifying the taxonomy . . . . .	38
2.5.2.1	The left periphery: CLLD I vs. CLLD II . . . . .	38
2.5.2.2	The Right periphery: CLRD I vs. CLRD II . . . . .	43
2.5.3	Cinque's (1990): the question of crosslinguistic validity . . . . .	45
2.5.4	The proposal . . . . .	53
2.5.4.1	A note on connectivity effects . . . . .	54
2.5.5	What about islands? . . . . .	57
2.6	Conclusion . . . . .	59
<b>3</b>	<b>Dislocation and Information Structure</b>	<b>61</b>
3.1	Introduction . . . . .	61
3.2	The information-structural characterization of left dXPs . . . . .	62

3.2.1	Aboutness . . . . .	63
3.2.2	Familiarity / Givenness . . . . .	66
3.2.3	Referentiality . . . . .	68
3.3	CLLD I and CLRD I in MSA : the proposal . . . . .	70
3.3.1	Question Under Discussion (QUD) . . . . .	70
3.3.2	Contrastive topics . . . . .	72
3.3.2.1	CLLD I in MSA . . . . .	73
3.3.3	Focus constructions . . . . .	75
3.3.3.1	Information Focus vs. Contrastive Focus . . . . .	77
3.3.3.2	CLRD I in MSA: Contrastive Focus . . . . .	78
3.4	Atypical topics in the left periphery: necessary detour . . . . .	83
3.4.1	How other languages license atypical topics . . . . .	84
3.4.1.1	Romanian . . . . .	85
3.4.1.2	Italian . . . . .	88
3.4.1.3	Greek . . . . .	91
3.4.1.4	Interim conclusion . . . . .	93
3.4.2	Contrast and atypical topics in MSA: the proposal . . . . .	93
3.5	Conclusion . . . . .	99
<b>4</b>	<b>It is a Single Clause! – The Monoclausal Analysis</b>	<b>100</b>
4.1	Introduction . . . . .	100
4.2	Clitic Left Dislocation (CLLD I) . . . . .	103
4.2.1	Demirdache (1991, 1997): CLLD is derived by LF move- ment of the clitic . . . . .	103
4.2.1.1	Discussion . . . . .	106
4.2.2	Cinque (1990): CLLD I is derived by Binding Chain . . . . .	114
4.2.2.1	Discussion . . . . .	117
4.2.2.2	Iatridou (1995): Cinque’s paradox . . . . .	122
4.3	CLLD I in Arabic . . . . .	126
4.3.1	Ouhalla (1997): CLLD I is derived by base-generation . . . . .	126
4.3.1.1	Discussion . . . . .	127
4.3.2	Aoun and Benmamoun (1998): two types of CLLD I . . . . .	129
4.3.2.1	Discussion . . . . .	131
4.4	Clitic Right Dislocation (CLRD) . . . . .	138
4.4.1	Kayne (1994): Right Dislocation as LF movement . . . . .	138
4.4.1.1	Discussion . . . . .	141
4.4.2	TP-external approaches to right dislocation . . . . .	145
4.4.2.1	Right dislocation is derived by movement . . . . .	146



4.4.2.2	Right dislocation is derived by base-generation	148
4.4.3	Monoclausal approaches to right dislocation: reevaluation	149
4.4.3.1	Base-generation analysis	149
4.4.3.2	Movement analysis	153
4.4.3.3	Right dislocation: remnant movement	154
4.5	Residual issues: templatic approach to the left periphery	157
4.5.1	Rizzi's (1997) Split CP: cascade of projections in the left periphery	158
4.5.2	Shlonsky (2000): Split-CP in Arabic	159
4.5.3	Problems for the Cartography program	160
4.6	Taking stock	164
<b>5</b>	<b>It is a Double Clause <i>indeed</i> ! – The Biclausal Analysis</b>	<b>167</b>
5.1	Introduction	167
5.2	Dislocation as clausal ellipsis	168
5.2.1	Fragments: a type of clausal ellipsis	171
5.2.2	Fragments in MSA	175
5.2.3	Specifying Coordination	178
5.3	CLLD I and CLRD I in MSA: a biclausal analysis	181
5.3.1	Deriving movement properties	181
5.3.1.1	$\theta$ and case properties	181
5.3.1.2	Reconstruction data	182
5.3.1.3	Island sensitivity: loose ends	183
5.3.2	Deriving base-generation properties	184
5.3.2.1	A c-command glitch	184
5.3.2.2	Weak Crossover (WCO) & Parasitic Gaps (PGs)	186
5.4	The dXP and clitic are not derivationally related	188
5.4.1	CLLD I and CLRD I in MSA as doubling phenomena	188
5.4.1.1	CLLD I and CLRD I are not agreement	189
5.4.1.2	CLLD I and CLRD I are not Clitic Doubling	196
5.4.2	CLLD I and CLRD I are not resumption	201
5.5	Conclusion	203
<b>6</b>	<b>The Elliptical Analysis: Miscellaneous Issues</b>	<b>205</b>
6.1	Introduction	205
6.2	Ellipsis and information structure	205
6.3	A (very short) note on the prosody of dislocation	208
6.4	Ellipsis and movement	210

6.4.1	What licenses ellipsis . . . . .	210
6.4.2	Movement And Deletion Approach: MADA . . . . .	213
6.4.2.1	Problems for MADA . . . . .	213
6.4.3	Evidence for MADA . . . . .	216
6.4.3.1	Preposition Stranding . . . . .	216
6.4.3.2	Islands . . . . .	220
6.4.4	The interplay between islands and dislocation . . . . .	224
6.4.4.1	Ott and De Vries (2016), De Vries (2013) . . . . .	225
6.4.4.2	Arabic dislocation and locality: the proposal . . . . .	227
6.4.5	Ellipsis is a phonological phenomenon . . . . .	233
6.5	Conclusion . . . . .	234
<b>7</b>	<b>Conclusion</b>	<b>235</b>
	<b>Bibliography</b>	<b>237</b>

# Abstract and lay summary

This thesis considers three intertwined research questions that are relevant to the phenomenology of dislocation in Modern Standard Arabic, henceforth MSA. The first of these research questions concerns the possible types of dislocation constructions. The second question concerns the interpretation of dislocation constructions. The last question takes on the syntactic make-up of dislocation constructions.

As far as the first question is concerned, I argue that left-peripheral elements in MSA are not uniform and thus they are best analyzed as comprising two different types: Clitic Left Dislocation I and Clitic Left Dislocation II. I further argue that the same constructions which appear in the left periphery have a presence in the right periphery, namely Clitic Right Dislocation I and Clitic Right Dislocation II. I further show that the determining factor underlying the partitioning of clitic resumption in MSA is morphological case (mis)-matching. Concerning the second question, I maintain that the interpretation of dislocation constructions in MSA is rooted in contrastiveness: the idea that the dislocated elements are drawn from a contrast set in the discourse.

As an answer to the third question, which constitutes the backbone of this thesis, I argue that the previous literature, which advances the idea that the dislocated element and its associated clitic in Clitic Left Dislocation I & Clitic Right Dislocation I coappear in the same clause, is empirically and conceptually problematic. As a solution to this impasse, I argue for the bisentential analysis: the idea that the dislocated element originates in a different clause from the clitic. Crucially, this thesis contributes to the 'biclausal' debate by furnishing an argument for an ellipsis-based analysis of Clitic Left Dislocation I & Clitic Right Dislocation I based on data from MSA.

# Acknowledgements

First of all, my heartfelt gratitude goes to my 'wonderful' supervisors Prof. Caroline Heycock and Prof. Peter Ackema for their kindness, generosity and meticulous comments on numerous versions of this thesis. Sadly, the final stage of writing up this thesis was concurrent with the spread of Covid-19 pandemic, which resulted in a massive lockdown. Notwithstanding, Caroline and Peter remained so supportive and encouraging throughout this difficult and 'weary' time. They always kept saying to me that 'if you need anything Ali, just send us an email'. I truly cannot thank them enough for what they did to me. Surely, this thesis would not have been possible without their consistent support. I am also grateful to Dr. Robert Truswell, who served as my co-supervisor in the first year and read earlier parts of this thesis, along with constructive comments. Thank you so much Rob!

I would also like to thank Dr. Dennis Ott from the University of Ottawa for truly informative and thought-provoking e-mail correspondences. I also thank Dr. Osama Soltan from Middlebury College for sending me his MA thesis (Soltan 1996). I also seize this opportunity to thank the reviewers of the following conferences for their input, which enhances the quality of the arguments presented in this thesis: the 43rd Generative Linguistics in Old World (GLOW 43), the 50th Annual Meeting of the North East Linguistics (NELS 50), the 30th Colloquium on Generative Grammar (CCG 30), the 2019 annual meeting of the Linguistics Association of Great Britain (LAGB) and the 44th annual Penn Linguistics Conference (PLC 44).

Special thanks go to my beloved mother and father, Fatima Almusaad & Ahmed Alzayid (may Allah have mercy on him) for everything. I am really short of words to thank them enough! I also thank my brother, Muhammed, and my sisters: Saleha, Aysha, Khulood and Safya for their support. I also thank my consultant Eyman Muhammed for her patience and availability.

Work on this thesis was fully supported by a grant from Jazan University, Saudi Arabia.

# Chapter 1

## Introduction

Dislocation is understood here as structures involving dislocated XPs, dXPs henceforth, after [Ott \(2015\)](#), which appear in non-canonical positions at either the left or the right edge of a sentence ([Lambrecht 2001](#); [Shaer et al. 2009](#)). Subsequently, two configurations stand out: Clitic Left Dislocation as in (1) and Clitic Right Dislocation as in (2). These dXPs (boldfaced) typically co-occur with a pronominal clitic (italicized) in the host clause (underlined).

- (1)    **aliy-an**, hayʔtu-hu  
         Ali-ACC greeted.1SG-him.ACC  
         ‘I greeted Ali.’
- (2)    laygatu-hu,            **zayd-an**  
         meet.1SG-him.ACC, Zayd-Acc  
         ‘I met Zayid.’

### 1.1 Three questions

The main aim of this thesis is to examine clitic resumption and dislocation constructions in MSA. To this end, three questions arise:

- (3)    What are the possible types of clitic resumption constructions in MSA?
- (4)    How are clitic resumption constructions in MSA interpreted?
- (5)    How best are clitic resumption constructions in MSA syntactically analyzed?

## 1.2 The language under investigation

Arabic is famously characterised by the co-existence of two varieties, which are taken to fulfill different functions. This phenomenon goes by the name of ‘diglossia’ by sociolinguists. While colloquial dialects are used for everyday conversation, the MSA variety is used in formal contexts (Soltan 2007). The language to be investigated in this thesis is MSA. According to Ryding (2005: p.5):

MSA is the language of written Arabic media, e.g., newspapers, books, journals, street signs, advertisements – all forms of the printed word. It is also the language of public speaking and news broadcasts on radio and television.

A prime reason to choose MSA as a subject of inquiry to the exclusion of colloquial varieties is morphological case. In fact, one of the main differences between MSA and other colloquial varieties is that the former is known for indexing morphological case. This is not the case, however, for Arabic dialects, which lost morphological case (Soltan 2007). This is indeed a crucial variable to control for since this thesis takes case-assignment as an encompassing criterion for the partitioning of clitic-resumption constructions in MSA.

One source for grammatical documentation of MSA is the grammaticality judgments of native speaker informants (Soltan 2007). Therefore, unless stated otherwise, all data reported in this thesis is produced by the researcher (being a native speaker of the language). To enhance the researcher’s intuition, it is checked by Eyman Muhammed, a specialist in the Arabic traditional theory.

## 1.3 Outline

The rest of this thesis is structured as follows: chapter 2 takes on the taxonomy of clitic resumption in MSA. The main finding of this chapter is that clitic resumption constructions in MSA are best classified into four types: Clitic Left Dislocation I/II and Clitic Right Dislocation I/II. As will be shown in due course, this new taxonomy is meant to capture a basic regularity underlying Arabic dislocation, which is rooted in case-(mis)matching between the dXP and its associated clitic. In remainder of this thesis, I confine myself to Clitic Left Dislocation I and Clitic Right Dislocation I. For one thing, this can be attributed to the fact that there is unanimity in the literature that Clitic Left

Dislocation II and Clitic Right Dislocation II do not pose a paradox from syntactic or pragmatic viewpoints: they are uniformly taken to be a topic-marking strategy and derived uniformly by a base-generation operation as opposed to movement.

Chapter 3 is concerned with the interpretation of clitic resumption in MSA. Section 3.2 takes up some conceptualizations which are proposed in the literature to capture the interpretation of left-peripheral elements. Section 3.3 is concerned with the proposal that what underlies the interpretation of Clitic Left Dislocation I & Clitic Right Dislocation I is contrastiveness. As a first approximation, I consider the possibility that Clitic Right Dislocation I in MSA is interpreted as an information focus. Given the fact that this position cannot account for why quantified NPs and indefinites cannot be right-dislocated, I argue instead that what underlies Clitic Right Dislocation I in MSA is contrastive (identificational) focus. This neatly ties in with the well-known distributional restriction imposed on elements interpreted as contrastive focus: they must denote a subset of a set. Due to the fact that quantified NPs and indefinites do not exhibit this pattern, they are disallowed to occur in the Arabic right periphery. As far as the Arabic left periphery is concerned, I show that this clausal area hosts only contrastive topics. Section 3.4, which constitutes the bulk of the chapter, takes on atypical topics, which are typically thought to resist topicalization at first sight, and argues that these elements can be left dislocated only under a contrastive reading.

Chapter 4 reviews the previous literature with respect to Clitic Left Dislocation I and Clitic Right Dislocation I, which argues for a monoclausal analysis: the claim that the dXP and its associated clitic coappear in the same clause. Crucially, I argue against this view on empirical and conceptual grounds. Chapter 5 argues for the proposal that Clitic Left Dislocation I & Clitic Right Dislocation I are best analyzed as a double clause. To start with, I examine in section 5.2 the main tenet of the proposed analysis: dislocation-cum-ellipsis. Section 5.3 is concerned with examining the merits as well as the consequences of analyzing Clitic Left Dislocation I & Clitic Right Dislocation I in MSA as biclausal configurations. I turn in section 5.4 to three lines of reasoning, which are typically employed under monoclausal approaches to account for Clitic Left Dislocation I & Clitic Right Dislocation I : agreement, clitic doubling and resumption. Chapter 6 concerns some remaining issues with respect to the biclausal analysis, which is argued for in chapter 5. At the outset, I take up ellipsis and information structure in section 6.2. Section 6.3 discusses how the

prosody of Clitic Left Dislocation I & Clitic Right Dislocation I can be derived under the biclausal analysis. Section 6.4 discusses how the proposed analysis can account for the interplay of locality constraints and Clitic Left Dislocation I & Clitic Right Dislocation I.

Chapter 7 concludes the thesis with a summary of the main findings, and considers some issues for future research.



## Chapter 2

# Dislocation and Clitic Resumption in MSA : A New Taxonomy

### 2.1 Introduction

This chapter is concerned with clitic dependencies in MSA; i.e. configurations which instantiate clitic-resumed elements. As far back as [Aoun and Benmamoun \(1998\)](#), it is argued that MSA has an Italian-style Clitic Left Dislocation. In this chapter, I argue that [Aoun and Benmamoun's](#) characterization of the left periphery in MSA is untenable for they fail to distinguish between two related constructions discussed originally in [Cinque \(1983, 1990, 1997\)](#): Clitic Left Dislocation (CLLD) and Hanging Topic Left Dislocation (HTLD). This claim is not completely new, since some authors, albeit in footnotes, have already pointed out that the taxonomic approach adopted by Aoun and Benmamoun is theoretically and empirically misguided ([Soltan 2007](#); [Villalba 2000](#)). Although [Lyassi \(2012\)](#) provides the most comprehensive critique of [Aoun and Benmamoun](#), unfortunately she takes a strict stand with respect to clitic dependencies in MSA, arguing that MSA does not have CLLD, but only HTLD. The novelty of this chapter, therefore, is to argue in favor of the claim that left-peripheral elements in MSA are not uniform, but are best analyzed as comprising two different types, as in Italian: CLLD and HTLD. For expository and terminological reasons which will be discussed in due course, I will deviate from the mainstream labelling and use a more neutral labelling to classify clitic resumption constructions in the Arabic left periphery. As far as right-peripheral elements are concerned, I argue that the same constructions which appear in the left periphery have a presence in the right periphery. I show that this new taxonomy captures a basic regularity underlying clitic-resumed

elements in MSA, and at the same time can be derived from a single property, which is rooted in case (mis)matching, *contra* previous studies in the dislocation literature which assume a stack of properties to decide between CLLD and HTLD for example. As will be clear in due course, just like the left periphery, dividing the right periphery into two types follows from a basic asymmetry having to do with case (mis)matching between the dXP and the correlate. Crucially, this new taxonomy may bear the risk of revising established terms, but I think that this step is necessary towards providing a transparent syntactic characterization of clitic-dependencies in MSA.

The rest of this chapter is divided into six sections. In section 2.2, I discuss how information structure can affect word order in MSA. Section 2.3 is concerned with examining the differences between CLLD and HTLD. Section 2.4 takes up the right periphery. Section 2.5 discusses a new taxonomy of clitic-resumed constructions in MSA. Section 2.6 concludes.

## 2.2 Word order and Information Structure

Prior to going into the maze of the sentential periphery in MSA, there is a theoretical prerequisite to be met for the benefit of presenting an insight into the phenomenology of dislocation in MSA; *viz.*, how information structure affects word order. In particular, one of the crucial criteria used in the typological research to classify languages concerns the distribution of some core elements in a given sentence. This type of characterization typically goes by the name of 'canonical word order'. The basic or canonical word order refers to the dominant order of the three elements "S[subject]" "O[object]", and "V[erb]" in an unmarked transitive declarative sentence. The unmarkedness of a sentential order is typically tested by recourse to pragmatic-neutral contexts; i.e. basic word order is uttered as a response to what is referred to as 'out of the blue' contexts, (*what happened?* for instance). This is not the only way to define basic word order, though. Some scholars for example argue that basic word order can be identified by either textual frequency, the order involving the least morphological marking (Hawkins 1983) or the order which permits the simplest syntactic description (McCawley 1970); cited in Mithun (1992: 125). Languages differ considerably in how word order is structured according to these criteria. While English and French show SVO order, other languages such as Persian, Korean and Latin display SOV order. Other logically possible word orders are attested cross-linguistically such as VSO, OSV and VOS. Since this issue is a

field of inquiry on its own, I will leave the matter at that. For a detailed discussion on the syntactic word order and its interaction with discursive contexts, the reader is referred to the volume edited by [Payne \(1992\)](#).

The question which arises at this juncture: can the word order of a given language be preserved at all times, regardless of contextual and discursive moves? The answer is a definitive no. In fact, as far back as [Stalnaker \(1978\)](#) human communication is argued to be mediated by the speaker and hearer's 'Common Ground': the set of propositions which are assumed that the hearer and the speaker share for a given context. When these sets of propositions differ, the flow of information must be packaged, or structured, i.e., Information packaging/ Information Structure ([Chafe 1976](#); [Halliday 1967](#)), so that the conversational output can be anchored by the contextual demands.

The basic entities underlying the research on Information Structure (IS) are TOPIC and FOCUS ([Lambrecht 1994](#); [Erteschik-Shir 1997](#); [Rizzi 1997](#)). Topic is typically equated with old information ([Vallduví 1992](#)), and is related to the notion of aboutness, i.e., the topic is what the sentence is about ([Reinhart 1983](#)). FOCUS, however, is taken to denote purely new and non-presupposed information ([Kiss 1998](#)). I will come back to the IS of dislocation in MSA in Chapter 3.

As far as word order in MSA is concerned, it has been argued that the underlying/ basic word order is VSO. This, in turn, gives rise to the conclusion that any order other than VSO involves a displacement process, i.e., a non-canonical order. The plausible rationale behind this structural reordering is typically attributed to pragmatic/discursive considerations. That is, "the criteria used to determine the basicness of one word order out of the number of orders that a given language may admit have essentially been pragmatic in nature" ([Bakir 1980](#): 9). What is relevant to the ongoing discussion is the fact that the notions of topic and focus have a tremendous impact on the clausal permutations in MSA: word orders in MSA are affected by IS-induced entities. To see how, consider the following examples displaying word orders different from the dominant VSO order. The data are given in the form of a dialogue to provide a conversational context.

- (1) a. muhammad-un    ?iftaraa kitaab-an  
       Muhammed-NOM bought book-ACC  
       'Muhammed bought a book. (SVO)
- b. Laa, SYARATTAN ?iftaraa Muhammad-un  
       no, car-ACC    bought muhammed-NOM  
       'No, Muhammad bought a CAR.' (OVS)

- (2) a. muhammad-un ?iftaraa kitaab-an, laken laa ??lmu min  
 Muhammed-NOM bought book-ACC, but don't know from  
 ?ya miktabat-en  
 which bookstore-GEN  
 'Muhammad bought a book, but I don't know from which book-  
 store'. (SVO)
- b. al-kitaab-a, muhammad-un ?iftaraa-hu from miktabat-i  
 the-book-ACC, Muhammed-NOM bought-it from bookstore-GEN  
 al-jam?at-i  
 the university-GEN  
 'As for the book, Muhammad bought it from the university's book-  
 store' (OSV)<sup>1</sup>

As is shown in (1b), OVS typically arises when the object is focussed, hence this re-ordering is often referred to as Focus Fronting (FF)". According to [Ouhalla \(1994a: 68\)](#), (FFs) in MSA are typically associated with a sentence-internal gap. Further, they require a strict adjacency between the preposed element and the verb, or in [Ouhalla's](#) terms, "preposed focus phrases trigger obligatory Subject Aux/Verb Inversion" (cf. 3a,b).

- (3) a. \*KITAB-AN Zynab-u qara?-at  
 book-ACC Zaynab-NOM read-3.FSG  
 'It was a book Zaynab read' [Ouhalla \(1994a: p.68\)](#)
- b. KITAB-AN qara?-at Zynab-u  
 book-ACC read-3.FSG Zaynab-NOM  
 'It was a book Zaynab read'

On the other hand, OSV of the kind in (2b) arises when the object is dislocated. In this case there is typically a clitic co-referential with the dislocated element, hence this re-ordering is often referred to as Clitic Left Dislocation (CLLD), the most illuminating property of which is the obligatory case-matching between dislocated object and clitic, *pace* [Ouhalla \(1994a\)](#). More on this in section 4.3.1.

Interestingly, not all IS-triggered entities are exclusively directed at the left periphery. To appreciate this point, consider the example in (4).

- (4) a. ayaan al-fawakiha allti ?ftryta-ha?  
 where the fruits-ACC which bought them?  
 'Where are the fruits which you bought?.'

<sup>1</sup>A caveat must be introduced concerning glossing: when citing data from other works, I reproduce the same glossing cited in relevant works. Hence, the glossing will be variable throughout. Following [De Cat \(2007: p.122\)](#), translation of my examples are given without dislocation to highlight the intended meaning, and at the same time provide a grammatical English sentence.

- b. waḏtu-ha fi al-ṡlajat-i,      ʔʕnni, al-fawakiha  
 put-them in the fridge-GEN, I mean, the-fruits-ACC  
 'I put the fruits in the fridge.'

The example (4b) illustrates the phenomenon of Clitic Right Dislocation (CLRD), which constitutes, along with CLLD depicted in (2b), the object of inquiry in this dissertation. Typically, CLRD is taken to be a topic-marking strategy (but see chapter 3 for a qualification). As is the case for CLLD, CLRD is characterized by there being a dXP surfacing at the right periphery, which is linked to the host clause (i.e. IP) via the intermediary of a pronominal clitic. It should be noted at this point that the use of a weak pronominal (i.e. a clitic) is a prime feature of CLLD and CLRD in MSA. As noted by Ott (2015: p.237), languages are different with respect to the type of the correlate used in Left dislocation constructions. German and Dutch, for example, employ (d)emonstrative-pronouns, while Icelandic makes use of personal pronouns, because this language lacks d-pronouns. The logic of this choice can be traced to a principle regulating the choice of pronouns in the grammar. In Cardinaletti and Starke's (1999: p.174) parlance, "(w)henever the two forms are in principle possible, a deficient form takes precedence over a strong form [...]. This is true of both weak pronouns and clitics: descriptively, a strong form is impossible if a deficient form is available".

Another construction which involves clitic resumption is Clitic Doubling. According to Anagnostopoulou (2006: p.520), Clitic Doubling is "a construction in which a clitic co-occurs with a full DP in argument position forming a discontinuous constituent with it". This is exemplified in (5).

- (5) Lo vimos a Juan  
 Him we-saw a Juan  
 'We saw Juan'

Contrary to other Arabic varieties like Lebanese Arabic (Aoun 1999), Clitic Doubling is not attested in MSA. Although there are many attempts in the literature to equate Clitic Doubling with other related constructions such as CLLD and CLRD, there are good reasons that Clitic Doubling must be distinguished from CLLD and CLRD. I will come back to this issue in section 5.4.1.2.

Typically, CLLD and CLRD pose very interesting questions both from a pragmatic and syntactic position. From a pragmatic view, it is not entirely clear what the discursive properties of CLLD and CLRD are, and whether or not these properties may receive a single information-structural interpretation,

which is typicality rooted in topicality.<sup>2</sup> Syntactically speaking, the issue which has received much attention, although it has not resolved yet, is how the dXPs in CLLD and CLRD are derived (i.e. base-generation vs. movement). These two issues will be addressed at length in chapters 3 and 4 & 5 respectively.

So far, the data presented points to the conclusion that TOPIC and FOCUS, *qua* IS entities, do have syntactic effects: they play a crucial role in the rearrangement of word order in MSA, since they are able to induce clausal permutations as shown earlier. The question is how to characterize the relation between syntax and IS? As far back as Chomsky (1971a) and Jackendoff (1972) the original observation is that IS entities are interfaces-sensitive items, which may be read off at the LF and PF components of the grammar.<sup>3</sup> In the original formulation of the minimalist program, Chomsky (1995: 220) reaffirms this stance with respect to incorporating IS operations into the syntax proper. He writes:

Notice that I am sweeping under the rug questions of considerable significance, notably, questions about what in the earlier Extended Standard Theory (EST) framework were called “surface effects” on interpretation. These are manifold, involving topic-focus and theme-rheme structures, figure-ground properties, effects of adjacency and linearity, and many others. *Prima facie*, they seem to involve some additional level or levels internal to the phonolog-

---

<sup>2</sup>As noted by Cinque (1997: 94), the use of the term topic for constructions involving CLLD is “perhaps somewhat misleading”. On another occasion, moreover, Cinque (1990: 180) notes that topicalization in Italian is in fact “focus movement”. Nonetheless, his rationale for keeping the term topicalization is “to emphasize its syntactic identity to the English construction”. Crucially, although there is a quasi-unanimity in the literature that CLRD is a strategy to mark topichood, this claim is far from universal; Law (2003) for example argues that Right dislocation in Cantonese is a device to mark focus. I will take on the informational aspect of dislocation in the next chapter.

<sup>3</sup>This crucially hinges on the so-called ‘Y-model’: an architectural representation of how grammar is perceived in the generative theory. According to this architecture, syntax, which is taken as the autonomous computational system, manipulates a set of items drawing from the Numeration to create linguistic expressions. These expressions are consequently shipped off to PF and LF, each of which interfaces with a different system: while PF interfaces with the articulatory-perceptual (AP) system, LF in turn interfaces with the conceptual-intentional (CI) system. Importantly, this model depends on a crucial assumption that PF and LF do not speak to each other, so to speak, to the extent that all linguistic properties affecting either PF or LF are exclusively encoded in the syntax proper. As it stands, this means that IS notions are lumped together at the door of linguistic interfaces (Chomsky 1995; Hornstein et al. 2005). This is not the only view of how to accommodate IS notions in generative grammar, however. In particular, there are already theoretical attempts arguing for the autonomy of ‘information structure’, the most important of which include Vallduví (1990)’s Informatics, Erteschik-Shir (1997)’s F-structure and Zubizarreta (1998)’s A-structure. For a very informative summary of these approaches to IS, the reader is referred to Eilam (2011: ch.5).

ical component, postmorphology but prephonetic, accessed at the interface along with PF and LF.

By contrast, there is an influential view which has gained very much attention in the literature by now. According to this view, IS elements are taken as entities feeding syntactic computation. This typically goes by the name of ‘the cartographic approach’ to IS notions (Rizzi 1997; Cinque and Rizzi 2009). The original observation is that information-structural notions such as TOPIC and FOCUS, target a designated landing site in a cascade of projections above the IP-area of the clause. Crucially, under this approach to IS, IS notions are typically encoded as features (i.e. [+Topic], [+Focus]), which trigger movement to the specifier of their corresponding projections. Despite its popularity as a theoretical approach to analyze IS notions, the cartography program has been subjected to both empirical and conceptual criticism, to be examined in chapter 4. Importantly, what is relevant at this point is that the analysis defended in this thesis departs radically from the traditions of the cartography program in not assuming that the IS notions, *qua* entities bearing unvalued features, could feed syntactic computation. The proposed analysis argues that the dXPs, *qua* IS elements, are best analyzed as base-generated fragments, which belong to an elided clause. This issue will be taken on at length in chapter 5.

To wrap up this section, it is clear by now that the basic word order of MSA can be rearranged, yielding multiple dislocation constructions. In what follows, I address these constructions in some detail.

## 2.3 Left Dislocation

The term left dislocation refers to a construction in which a dXP is displaced to the left edge of the clause preceding a full proposition, which contains a pronominal element. Various types of left dislocation constructions have been discussed in the literature. In particular, Van Riemsdijk (1997) proposes the following typology of left-dislocation configurations where the nature of the resumptive element is the main criterion for the distinctions.

1. Hanging Topic Left Dislocation (HTLD), which is also called Left Dislocation.(LD). This is typically characterized by there being a dXP in the left periphery of the clause and co-occurring personal pronouns, epithets or clitics in the host clause. This is illustrated in (6), where pronouns in Bulgarian, *qua* hanging topics, do not display case connectivity with the resumptive pronoun; taken from Cinque and Krapova (2008: 260).



- (6) Tja i bez tova ne moga da ja  
 she.NOM and without that not can.1SG MOD.PRT her.CL.ACC  
 nakaram da jade.  
 make.1SG MOD.PRT eat.3SG  
 'I cannot make her eat anyway.'

2. Contrastive Left Dislocation (CLD), which is characterized by there being a dXP in the left periphery of the clause, which is related to the host clause via a demonstrative pronoun, as in (7), taken from [Anagnostopoulou \(1997: 152\)](#).

- (7) Die man, **die** ken ik niet  
 That man, that-one know I not  
 'I do not know that man' (Dutch)

3. Clitic Left Dislocation (CLLD), in which the dXP is related to a clitic in the host clause as in (8), taken from [Anagnostopoulou \(1997: 153\)](#). More on the distinction between CLLD and HTLD in section 2.3.1.

- (8) Ton Petro ton nostalgia poli  
 the Peter-ACC CL-ACC miss.1SG much  
 'I miss Peter a lot.' (Greek)

4. Loose Aboutness Left Dislocation (LALD), the least attested left dislocation construction cross-linguistically, where the connection between the dXP and the correlate in the host clause is captured by pragmatic rather than morphosyntactic means. This is exemplified in (9) for French, taken from [Van Riemsdijk \(1997: 4\)](#).

- (9) Oh, tu sais, moi la bicyclette, je n'aime pas me fatiguer  
 Oh, you know me the bicycle, I don't like to tire myself

In what follows, I will zoom in on CLLD and HTLD. I will first sketch their properties and then work out a new taxonomy of clitic resumption constructions in the left periphery, where I argue that both CLLD and HTLD are present in Arabic, contrary to the previous literature. Evidently, this shall have an analytic import as we will see in due course.



### 2.3.1 Hanging Topic vs. Clitic Left Dislocation

In a series of seminal works, drawing on data primarily from Italian, Cinque (1977, 1983, 1990, 1997) argues that there are two types of left dislocation which must be teased apart: Clitic Left Dislocation (CLLD) and Hanging Topic Left Dislocation (HTLD). Both of these constructions display different syntactic properties as shown in the following table, adapted from Cinque (1997: p.96).

Table 2.1: The diagnostics for HTLD and CLLD

HTLD	CLLD
1. The lefthand phrase can be of category NP only.	1. The lefthand phrase can be of category NP, PP, AP, S (essentially any X maximal, in the sense of X theory).
2. There may be at most one lefthand phrase.	2. There is no (theoretical) limit to the number of lefthand phrases.
3. The lefthand phrase occurs typically to the left of a 'root' S.	3. The lefthand phrase can occur to the left of 'root' and 'non-root' Ss.
4. The 'resumptive element' can be a 'pronominal'.. epithet, like <i>that poor guy</i> ) or an ordinary pronoun, either tonic or clitic.	4. The 'resumptive element' can be a clitic pronoun only.
5. There is no connectedness between the lefthand phrase and the resumptive element (in terms of Case matching, etc.)	5. There is obligatory connectedness between the lefthand phrase and the resumptive element (in terms of Case matching, etc.).
6. The relation between the lefthand phrase and the resumptive element is not sensitive to island constraints.	6. The relation between the lefthand phrase and the resumptive element is sensitive to island constraints.

Having listed all relevant properties which tease CLLD and HTLD apart, I turn now to a detailed discussion of these properties. After that, I will move on to Arabic in section 2.3.2 to see how the Arabic data can fit within the properties of dislocation constructions attested in Romance languages as manifested in Table 2.1.

According to Table 2.1, unlike the dXP in HTLD which can be only NP as shown by the contrast in (10), the dXP in CLLD as in (11) can be any phrasal category (i.e. PP, adjP etc.).

- (10) a. Pierre, je n'aime pas cet idiot  
 Pierre, I don't like that idiot  
 [French, Delais-Roussarie et al. (2004: 502)]  
 b. \*To John, I have already spoken to him. Cinque (1990: p.58)

- (11) a. Almare, ci siamo già stati  
to the-seaside there-CL we-have already been  
'We have already been to the seaside'
- b. Bella nonlo è mai stata  
beautiful not it-CL she-was ever been  
'She was not ever beautiful'
- c. Tutti, non li ho visti ancora  
all not them-CL I have seen yet  
'I have not seen all of them' [Italian; Cinque (1990: 57-58)]

The nature of the resumptive pronoun is another diagnostic to set apart CLLD and HTLD. In particular, while the resumptive element in CLLD can be only a clitic pronoun, the resumptive element in HTLD " can be a 'pronominal'.. epithet, like [*that idiot* as in (10)] or an ordinary pronoun, either tonic or clitic" (Cinque 1997: 96). Going back to the data in (10a) and (11), it seems clear that this is indeed the case in that (10a) for example illustrates the possibility of an epithet as the resumptive in HTLD, contrary to CLLD cases in (11), all dXPs being related to the host clause by clitics.<sup>4</sup>

Another criterion to distinguish between CLLD and HTLD is whether the dXP can surface in (non)-root clauses. Whereas HTLD is not licensed in an embedded clause ( i.e. it appears exclusively in a root clause ), CLLD is fine in root and non-root clauses. This is exemplified in (12).

- (12) a. \*Je sais que Zelda, personne n'aime cette harpie  
I know that Zelda nobody NEG-loves that harpy  
HTLD [French; De Cat (2002: 107)]
- b. Je sais que Zelda, personne ne l'aime  
I know that Zelda nobody NEG her loves  
'I know nobody likes Zelda' CLLD [French; De Cat (2002: 107)]

CLLD is argued to exhibit connectivity effects; the dXP behaves as if it were in the host clause. This effect can be manifested in case matching, anaphoric

<sup>4</sup>Surprisingly though, Pablos maintains that as far as CLLD is concerned, " (t)here must be a gap and no overt category can appear in the gap site, although typically there is a coreferential clitic". He dubs such a construction as 'Clitic-less CLLD'. Admittedly, this quote contains a highly internal contradiction. In other words, in the absence of a pronominal clitic, the construction ceases to be CLLD but topicalization, which is known to involve a dXP associated with a gap; see Cinque (1983, 1997). Interestingly, 'clitic-less' dislocation is in fact at odds with some recent 'radical' proposals which argue that genuine argument dislocation must involve clitics; see Cruschina (2010) a.o. for an account that " non-resumed dislocation actually corresponds to structures other than CLLD/CLRD". At any rate, the characterization of Pablos seems spurious since it does not get us closer to a good understanding of the so-called "clitic-less CLLD" since he merely restates the fact but without explaining them in cogent terms, unfortunately.

dependencies (i.e. bound variable readings and anaphors) and idiom chunks. By contrast, such effects are not attested in HTLD. The following exposition illustrates this (unless indicated otherwise, the Greek examples illustrating connectivity effects in this section are taken from [Anagnostopoulou \(1997: 154ff\)](#)).

To start with, The dXP in CLLD as in (13a) shares the same morphological case as the correlate (i.e. accusative). By contrast, the dXP and the correlate in HTLD of the type in (13b) show a different morphological case.

- (13) a. Ipe oti tin Maria tin emathe kala tosa xronia  
           said that the Mary-ACC CL-ACC he-knew good so-many years  
           ‘He said that he had figured Mary out after so many years’  
       b. I Maria tin ematha kala tosa xronia  
           The Mary-NOM, CL-ACC knew-1SG good so many years  
           ‘I have figured out Mary after so many years’

Interestingly, this pattern of case connectivity correlates with licensing left-peripheral anaphors: a displaced anaphor with a case-matched clitic (i.e. CLLD) can be bound by an antecedent that does not seem to c-command it as shown in (14a). This is not, however, the case with (14b), where case-mismatching HTLD seems to block licensing displaced anaphors.

- (14) a. Ton eaftos tu O Jannis den ton frontizi  
           The self-ACC his-GEN the John-NOM not CL-ACC take care-3SG  
           The self-ACC his-GEN the John-NOM not CL-ACC take care-3SG  
       b. \*O eaftos tu O Jannis den ton frontizi  
           The self-NOM his-GEN the John-NOM not CL-ACC take care-3SG  
           ‘John doesn’t take care of himself’

CLLD further allows for a bound reading of pronouns which are embedded in a CLLD constituent and bound by a quantifier in a subject position (cf. 15a ). This is not the case for HTLD cases, however (cf. 15b ).

- (15) a. Tin mitera tu kathenas tin agapai  
           The mother-ACC his-GEN everyone CL-ACC love-3SG  
           ‘Everyone loves his mother’  
       b. \*I mitera tu kathenas tin agapai  
           The mother-NOM his-GEN everyone CL-ACC love-3SG  
           ‘Everyone loves his mother’

While a bound reading of the CLLD-embedded pronoun ‘his’ is possible in (15a), it is not attained easily in (15b). The rationale behind this is the fact that the dXP in HTLD, which invariably shows up in a default nominative case ( i.e. *nominativous pendens*), is unconnected to the host clause. This is evident from the

fact that the corresponding clitic bears the accusative case. It should not come as a surprise then that HTLD of the type in (15b) defies a bound reading of embedded pronouns since the dXP is not in a relation of a similar morphological identity with the clitic in terms of case matching. Consequently, this different identity (i.e. case mismatching) explains why HTLD resists a bound reading of pronouns depicted in (15b). In particular, the possibility of a bound reading of pronouns is captured by appeal to hierarchical terms which are captured by a c-command relation. Thus, bound pronouns can be interpreted as variables only if they are reconstructed to a position where they can be c-commanded by their operators at LF ([Higginbotham 1980](#)). Since the relation between the dXP and the clitic in HTLD is not similar (i.e. case mismatching), then reconstruction into the host clause cannot be established in the absence of case matching, which is taken as a prerequisite to reconstruction of dXPs in dislocation configurations. Conversely, the case matching effect attested in CLLD of the type in (16a) makes the possibility of a bound reading of pronouns much easier since case connectedness presupposes that the dXP has been within the host clause at some time of the derivation, and thereby it is tempting to assume that CLLD-embedded pronouns are reconstructed for the purposes of pronominal binding.

Another classic case of connectivity effects is idiom chunks. It is standardly assumed that the interpretation of idioms obtains typically in a strictly local domain ([Marantz 1984](#)).

- (16) a. Tin tixi tu kathe ftochos tin ekane pigenontas  
 The luck-ACC his-GEN every poor CL-ACC made going  
 stin Ameriki  
 to-the states
- b. \*I tixi tu# kathe ftochos tin ekane pigenontas  
 The luck-NOM his-GEN every poor CL-ACC made going  
 stin Ameriki  
 to-the states  
 ‘The poor made their luck/fortune by going to the States’

The contrast in (16) illustrates the contrast between idioms contained in a CLLD structure (16a), and in a HTLD structure (16b). Unlike HTLD as in (16b), the interpretation of idioms is retained in CLLD articulations as in (16a). This follows straightforwardly by assuming that the dXP must be in a local relation with the clitic at some point of derivation for a felicitous idiomatic interpretation. As pointed out earlier when discussing anaphoric dependencies, the dXP

in a HTLD structure never stands in a local relation relative to the clitic. This is evident from the fact that both elements share a different case morphology. Thus, idiomatic interpretation is not expected to be felicitous in (16b) owing to the absence of a local domain which is required for idiomatic relations. However, on the approach that case-matching is symptomatic of connectedness, idiomatic interpretation is possible in CLLD since the dXP and the clitic share the same morphological case. This entails that the two elements originate in a local domain within the host clause, yielding a well-formed sentence in (16a).

Then comes the locality issue. In particular, while the relation between the dXP and its corresponding clitic is subject to (strong) islands for CLLD, HTLD is not sensitive to all kinds of islands, be it weak or strong (i.e. the dXP can be separated from its associated clitic by islands). As the contrast exemplified in (17) shows: while HTLD is not sensitive to a relative clause island, CLLD is. More on this in section 2.5.5.

- (17) a. I Mary htes gnorisa ton andra pu tin pandreftike  
the Mary-NOM yesterday met the man that her married  
'As for Mary, I met yesterday the man that married her'
- b. \*Tin Maria htes gnorisa ton andra pu tin pandreftike  
the Mary-ACC yesterday met the man that her married  
'As for Mary, I met yesterday the man that married her'

(Alexiadou 2006: 674)

Finally, there can be more than one dXP in CLLD but not in HTLD<sup>5</sup>. The contrast between Italian and English depicted in (18-19) illustrates the point (Alexiadou 2006: 672).

- (18) Di vestiti a me Gianni in quell negozio non mi ce ne ha  
Clothes to me Gianni in that shop not to me there of them has  
mai comprati  
ever bought  
'As for clothes, for me, Gianni has never bought them in that shop'

- (19) \*Mary John she likes him.

To conclude the discussion so far, the bipartition into CLLD and HTLD hinges on the assumption that the latter can be relegated to discourse grammar where the dXP is not syntactically connected to the correlate in the host clause. By contrast, CLLD is a bonafide sentence grammar configuration where the

<sup>5</sup>It should be noted, though, that unlimited status of CLLD does not mean that dXPs can be stacked indefinitely. According to Frascarelli (2000), Italian spoken corpora show that no more than three dXPs can be realized in the left periphery.

Having discussed the properties of CLLD, I move now to Arabic to see if this language fits in well with the diagnostics shown in Table 2.1.

- (22) kariim zeina arrafnee-ha            ?al-ee  
 Karim Zeina introduced.1S-her to-him  
 'Karim, Zeina, we introduced her to him.'

Contrary to the diagnostics of CLLD shown in Table 2.1, CLLD in LA does not exhibit grammatical connectivity with respect to Condition C effects, a prime class of connectivity effects employed in the dislocation literature (Zeller 2004, 2005). This is shown in (26), taken from Aoun et al. (2010)

- (23) S-Sabe yalli naadia htammit fi-i        aTit-o            sirweel  
 the-boy that Nadia cared.3FS in-him gave.3FS-him pants  
 'The boy that Nadia took care of him, she gave him pants.'

In (23), the NP '*Nadia*' contained within the complex dXP can be coreferential with the pronominal subject '*she*' in the host clause. On the approach that Condition C would arise if a proper name is c-commanded by a coreferential element, then the grammaticality of (23) is readily accounted for by assuming that the dXP in (23) does not reconstruct for the purpose of binding and hence connectivity effects are not expected to arise. In other words, the NP '*Nadia*' is not c-commanded by the pronominal subject '*she*' at any stage of the derivation and hence it is tempting to assume that the dXP is not connected to the host clause. As will be shown in section 2.5.2.1, this conclusion cannot be extended to MSA in that Condition C effects in CLLD in MSA arise with case-matched dXPs.

Also contrary to the Italian-style CLLD, the relation between the dXP and the clitic in LA is not subject to islands, be it weak such as a *wh*-island (24a), or strong such as an adjunct island as in (24b). More on this below.

- (24) a. sməft    ?anno naadia byaʔrfo    miin ʃeef-a  
           heard.1S that    Nadia know.3P who saw.3MS-her  
           'I heard that they know who saw Nadia.'
- b. sməft    ?anno naadia rəht        mən duun ma təhke maʔ-a  
           heard.1S that    Nadia left.2MS without not    talk.2MS with-her  
           'I heard that you left without talking to Nadia.'

The same holds true of MSA. In particular, the relation between the dXP and the pronominal clitic may be separated by (strong)islands. This is shown for Complex NP constraint (25), Subject condition (26) and adjunct island (27).

- (25) zayidan    hyiaat            [al-mudaressa    allōi darasahu]  
       Zayid-ACC pro greet-1SG the-teacher-ACC who teach him-ACC  
       'I greeted the teacher who teaches Zayid'



- (26) kutuba Chomksy, [qira?tuha] yayatun fi a?tʕigidi  
 books-ACC Chomsky, reading them very difficult  
 'Chomsky's books are hard to read'
- (27) zayidan, umuhu yadart [qabla liqa?-hi]  
 Zayid-ACC mother-his left.3SG [before meeting-him]  
 'Zayid's mother left before she met him'

Summarizing thus far, according to the discussion in [Aoun and Benmamoun \(1998\)](#) and [Aoun et al. \(2010\)](#), Arabic has an Italian-style CLLD where the dXP is dislocated to the left periphery and is related to the host clause via the intermediary of a clitic. Contrary to Italian CLLD as observed in [Cinque \(1977, 1983, 1990, 1997\)](#), Arabic CLLD exhibits the following properties: (i) no connectivity effects (this will be qualified shortly); (ii) insensitive to islands and (iii) only NPs can be CLLDed.

Indeed, there has been a thread running through the literature claiming that [Aoun and Benmamoun \(1998\)](#)'s characterization of topic constructions in Arabic, namely as being CLLD, is inadequate. For instance, [Soltan \(2007: 52, fn.10\)](#) notes in passing that the data presented by [Aoun and Benmamoun \(1998\)](#) supports a HTLD analysis, which means that Standard Arabic has HTLD to the exclusion of CLLD. The same objection has been echoed briefly by [Villalba \(2000: 264, fn.29\)](#) where it is maintained that [Aoun and Benmamoun](#)'s treatment "standardly corresponds to an instance of HTLD, which is insensitive to islands and does not show construction connectedness". In addition, [Lyassi \(2012\)](#) argues against [Aoun and Benmamoun \(1998\)](#)'s conclusion that Arabic has CLLD. In particular, by applying a subset of [Cinque](#)'s diagnostics pointed out in Table 2.1, she concludes that SA does not pattern with the Italian-style CLLD, but a HTLD analysis, since this language does not show connectivity effects nor is it sensitive to islands. At this point, it seems that there is unanimity with respect to the status of the left peripheral dXPs in Standard Arabic: they are uniformly instances of HTLD contrary to the proposal of [Aoun and Benmamoun \(1998\)](#). More on the diagnostics below.

Before going into the details of my proposal with respect to the plausible characterization of clitic-resumption constructions in the Arabic left periphery, I pause a moment to look at the right periphery.



## 2.4 Right Dislocation

### 2.4.1 Clitic Right Dislocation

The term right dislocation refers to a construction in which a dXP is displaced to the right edge of the clause following a full proposition/clause, which typically contains a pronominal clitic. This is exemplified in (28).

- (28) Jean la voit souvent, Maria  
Jean her sees often Mary  
'Jean sees her often' French (Kayne 1994: 79)

Interestingly, the same diagnostics proposed to distinguish between CLLD and HTLD are argued to apply to the right periphery as well. In particular, De Cat (2002, 2007) maintains that Clitic Right Dislocation (CLRD) is the mirror image of CLLD insofar as CLRD exhibits the same properties as CLLD. Indeed, it goes to Villalba (2000)'s credit to have discussed CLRD at length. For reasons of space, I will confine myself to the proposal of Villalba (2000) since it is the most comprehensive discussion of resumed elements in the right periphery, to the best of my knowledge. Nevertheless, I will cite data from other sources when relevant.

According to Villalba (2000), CLRD must be distinguished from parallel constructions such as Right Dislocation as in (29), and Right Scrambling as in (30). While the dXP in the former is related to a strong pronoun, no overt resumption is realized in the latter.

- (29) The cops spoke to him about that robbery yesterday, the janitor. (Ross 1967)
- (30) John-ga tabeta-yo, cake-o.  
John-NOM ate-MOD cake-ACC  
'John ate that cake.' Japanese (Endo 1996)

With this in mind, I turn now to CLRD which exhibits the following properties as summarized in Table 2.2, adapted from Villalba (2000).

Table 2.2: The diagnostics for CLRD

The diagnostics for CLRD
The dXP can be any maximal projection
It is sensitive to strong islands.
The correlate must be a clitic
It can be iterative.
It shows connectivity effects.
The dXP can occur in both root and non root clauses

The first property of CLRD concerns the category of XP: the dXP in CLRD can be any maximal projection as shown in (31), featuring CLRD which involves DP and PP respectively. Note, incidentally, that there is a comma signalling the prosodic break of the dXP from the host clause containing the clitic.

- (31) a. el vam comprar a Barcelona, el llibre.  
him PAST-1PL buy in Barcelona the book  
‘We bought it in Barcelona, the book.’  
b. en vam parlar ahir, de la Maria.  
of.it PAST-1PL talk yesterday of the Maria  
‘We talked about her yesterday, Maria.’ (Catalan)

Second, the resumptive pronoun is obligatory and must be a clitic as the contrast in (32) illustrates.

- (32) a. \*vam parlar ahir, de la Maria.  
PAST-1PL talk yesterday of the Maria  
‘\*We talked about yesterday, Maria.’  
b. en vam parlar ahir, de la María.  
of.it PAST-1PL talk yesterday of the Maria  
‘We talked about her yesterday, Maria.’ (Catalan)

Third, the dXP must be interpreted as having the same  $\theta$ -role and morphological case it would have were it not dislocated.

- (33) Les he posades a la nevera, les figues.  
them have put in the fridge the figues  
‘I’ve put the figues in the fridge.’ Catalan ([Fernández-Sánchez 2020](#))

Fourth, the dXP cannot be separated from its corresponding clitic by an island. This is exemplified in (34), where the Coordinate Structure Constraint is violated giving rise to ungrammaticality.

- (34) \*[La Maria va preparar-lo] i en Pere va parlar d’aquest llibre,  
the Maria prepare-it and the Pere PAST talk of-this book,

el sopar.  
the dinner  
Intended meaning ' Mary prepared the dinner and Pere talked about  
this book'  
(Catalan)

Fifth, the dXP in CLRD can appear both in root and embedded clauses.<sup>8</sup>

- (35) a. no woh sé qui en va parlar ahir, del llibre  
not who of.it PAST-3 talk yesterday of-the book  
'I don't know who talked about it yesterday, the book.'
- b. sembla que en va parlar ahir la Maria, del llibre.  
seems that of.it PAST-3 talk yesterday the Maria of-the book  
'It seems that Maria talked about it yesterday, the book.'
- (Catalan)

Finally, CLRD can be iterative: more than one dXP can be realized.

- (36) Li<sub>1</sub> en<sub>2</sub> va parlar ahir al Pere<sub>1</sub>, del llibre<sub>2</sub>.  
her of.it PAST-3 talk yesterday with the Pere of-the book  
'(S)he talked with Pere about the book.'
- (Catalan)

Having discussed the properties of CLRD in Catalan, I turn now to MSA to see if this language fits in well with the diagnostics shown in Table 2.2.

## 2.4.2 CLRD in Arabic

As far as Arabic syntax is concerned, the literature on RD is rather scarce, and typically couched in functional/discourse terms (Moutaouakil 1989; Holes 1990). At the generative scene, I am not aware of a single study, to my knowledge, on RD in Arabic. All the previous accounts with respect to the syntax of peripheries were exclusively confined to the left area of the clause structure.<sup>9</sup>

Upon closer inspection, one cannot miss the fact that Arabic has a quasi-Romance CLRD, where the dXP is related to the host clause by a cataphoric clitic. The example (37) illustrates the point, the dXP being displaced to the right periphery, which is taken to be external to the host clause containing the clitic.

<sup>8</sup>The question which may arise is: given the fact that the dXP appears on the right edge of the clause in these sentences, how can one decide whether the dXP is in the embedded clause or in the main clause? I assume that the position of clitic, *qua* a resumptive element, can give us a clue on where the dXP originally appears, that is, by looking at the position of the clitic in (35a,b), it is clear that it occurs within the domain of the embedded clause.

<sup>9</sup>Apart from Ouhalla (1994b: 54), who discusses right-dislocated subjects in passing on the sidelines of his discussion of verb movement and word order in Arabic; CLRD is sporadically mentioned in a 3000-page encyclopedia on Arabic linguistics; see Versteegh and Eid (2005)

- (37) a.  $\delta^{\text{f}}$ arabt-hu, zayid-an  
           hit-him      Zayid-ACC  
           'I hit Zayid'.
- b.  $\delta^{\text{f}}$ arabt-u zayid-an  
           hit            Zayid-ACC  
           'I hit Zayid'.

The question which arises at this point: to what extent is CLRD in Arabic similar to Romance cases? In order to provide an answer, I apply Villalba (2000)'s diagnostics of CLRD to Arabic to see whether or not this language displays all properties characteristic of CLRD. Attending first to the kind of pronominal employed in CLRD, the dXP in CLRD must co-occur with a clitic. The example in (37) confirms that this is the case in Arabic where the dXP '*zayid-an*' is resumed by a weak pronominal attaching to the verbal host. If the clitic is absent, the construction ceases to be an instance of dislocation, and the object is generated in an in-situ position, as illustrated in (37b). A further explanation for the contrast in (37) is that the dXP in (37a), unlike the object in (37b), does not prosodically belong to the host clause as evidenced by the presence of a comma; a property of dislocation: it forms an intonational phrase on its own.

In the Catalan instances shown earlier, (i) the dXP can be any phrasal category and (ii) it must be connected to the host clause. At this point, CLRD in Arabic takes a divergent route in that only NPs can be CLRD-ed, as shown by the ungrammaticality of right dislocation of PPs in (38a), and (ii) the dXP shows connectivity effects in some cases as the examples in (38b,c) illustrate.

- (38) a. \*ʔʔtaytu-hu    al-kitaba li alian  
           gave.1SG-him the-book to Ali  
           'I gave the book to Ali'
- b. zurtu-hu,            zaydan  
           visited-1SG.ACC Zayid.ACC  
           'I visited him, Zayid'
- c. zurtu-hu,            zaydun  
           visited-1SG.ACC Zayd.NOM  
           'I visited him, Zayid'

According to the examples in (38b) and (38c), it is evident that CLRD shows some properties which are not shared by Catalan in the previous section: while the dXP is uniformly a NP, connectivity effects are not attested in a uniform way. In (38b), the dXP shares the same morphological case as the correlate; both appear in accusative case. The dXP in (38c), however, shows up in nominative while its correlate is accusative.

As far as the locality conditions are concerned, things are less straightforward w.r.t CLRD in MSA. To start with, CLRD I in MSA is island sensitive as the examples below show: while the clitic is embedded in a fronted clause in (39), the *'pro'* is inside a temporal adjunct in (40). For convenience, island domain is put in brackets.

- (39) \*[aan alyian taharafa bi-ha], aʒidu-hu amran  
that Ali-ACC harasses-3SG with-her, pro find it something  
mustahʒanan, aani aukhtaka  
disgusting, (I mean) your sister.  
'It is disgusting that Ali harasses your sister'
- (40) \*[ʔindama qadimat rakathat-an] qafaza zayidun min  
when pro came walking, jumped Zayid-NOM from his  
syrratiyhi, tilka almarʔah  
car-GEN, that woman  
'\*When she came walking, Zayid Jumped out of his car, that woman'<sup>10</sup>

Now consider the following grammatical data. The dXP is related to a pronominal in a relative clause and an adjunct in (41) and (42) respectively.

- (41) tahadaθtu maa al-raʒuli allði taharafa bi ha, tilka alʔmrʔah  
talked.3SG with the man-gen who harass.3SG with her, that woman  
'I talked with the man who harass that woman'
- (42) Zaydun qafaza min syrratihi ʔindama wasalat  
Zayid-NOM jumped.3SG from car-his when pro arrived  
rakithatan, ʔani tilk alimrʔah  
walking, (I mean) that woman.  
'Zayid jumped out of his car when he saw the woman'

Further, CLRD in MSA cannot be iterative as in (43), but it can appear in embedded clauses as in (44).

- (43) \*aʕitytu-hu<sub>i</sub> la-hu<sub>k</sub>, alkitab-a<sub>i</sub>, Aliy-an<sub>k</sub>  
pro gave-it to-him, the book-ACC, Ali-ACC  
'I gave the book to Ali'
- (44) yabdu ʔinna aliy-an qaraʔ-hu lilata albariha, al kitab-a  
seems that Ali-ACC read.3SG-it night yesterday, the book-ACC  
'It seems that Ali read the book last night'

<sup>10</sup>One may wonder why I treat the example in (80) as CLLD although there is no a clitic. In fact, this is attributed to the fact that the dXP is related in this instance to a subject position, and hence there is a pro-(drop) element; a prime feature of MSA.

Thus far, there seems to be evidence that CLRD is not a uniform phenomenon across languages. Arabic and Catalan are cases in point where the syntactic properties of CLRD are not the same in both languages, as shown in Table 2.3.

Table 2.3: Comparison between MSA and Catalan

<b>The diagnostics for CLRD</b>		
	MSA	Catalan
The dXP can be any maximal projection	✗	✓
It is sensitive to strong islands.	✗/✓	✓
The correlate must be a clitic	✓	✓
It can be iterative.	✗	✓
It shows connectivity effects.	✗/✓	✓
The dXP can occur in both root and non root clauses	✓	✓

One way to explain this is to assume that the behavior of CLRD varies from a cross-linguistic perspective. Frankly, this amounts to nothing since it is little more than a descriptive restatement of the observed facts. Since the ultimate goal of any scientific theory is to achieve an explanatory adequacy, I will contemplate a solution which is centered on the fact that CLRD is not a uniform phenomenon. As such, I maintain that clitic-resumed elements in the right periphery are best understood by claiming that it does involve a bi-partition mechanism which is argued to apply to clitic-resumed elements in the left periphery. This is the core of the next section.

## 2.5 Clitic Configurations in Arabic: a new taxonomy

At this juncture, a question comes up with regard to the fact that there is evidence pointing to the conclusion that clitic-resumed configurations in MSA are not uniform. This is evident from a set of data which cannot be taken as bonafide CLRD/CLLD since they do not fare well with the diagnostics put forth in Cinque (1983, 1997) and Villalba (2000). In what follows, I argue that clitic-resumed configurations in MSA are best divided into four types, each of which has a salient property which is rooted in case (un)connectivity. These four types include: Clitic Right Dislocation I (CLRD I), Clitic Right-Dislocation II (CLRD II), Clitic Left Dislocation I (CLLD I) and Clitic Left Dislocation II (CLLD II).

### 2.5.1 Terminological note

Before proceeding to my proposal with respect to the taxonomy of clitic-resumed constructions in Arabic, a terminological note is in order. As is well known, the literature on the phenomenology of dislocation in natural languages is shrouded in terminological clashes and inconsistencies. A clear example of such a tangle is the fact that what is referred to as topicalization and focalization in Rizzi (1997) is taken to be clitic left dislocation and topicalization in Cinque (1990). The situation is particularly bad when the construction involves some sort of resumptive pronoun. This is the case for example with Contrastive Left Dislocation (CLD) and Hanging Topic Left Dislocation (HTLD), which are typically framed under a rather vague terming. In particular, although CLD and HTLD employ an overt correlate in their derivations, the literature does not spell out this clearly, but instead it resorts to a descriptive content which lacks clarity. Thus, for ease of exposition and for the purpose of providing a term which is as neutral as possible, I coin the term CLLD II, which corresponds to what is known formerly as HTLD in the mainstream literature. This is not merely a cosmetic labeling, though: it is mainly proposed to highlight the fact that this construction in Arabic employs clitics in contrast to English/Greek-type HTLD, which make use of tonic pronouns instead. Further, as will be clear in due course, proposing the dichotomy CLLD I/CLLD II and CLRD I/CLRD II should be taken as a theoretical gain since it captures the fact, superficially at least, that the two pairs (i.e. CLLD I/CLRD I vs. CLLD II/CLRD II) are derived in a completely different manner.

The reader may object that this is a mere complication, which the theory aspires to keep to a minimum against the backdrop of economy and parsimony. This is a plausible objection indeed, but given the fact that there is no terminological consensus in the dislocation literature as to the possible types of dislocation, one then is obliged to come up with terms which could serve better in terms of descriptive adequacy. One may also object that this move tends to be language-specific. In fact, the reason why the literature on dislocation witnesses a great deal of terminological variations can be attributed in part to language-specific considerations, that is, applying one term to a certain language does not mean in any way that this term could capture the data in another language. In some instances, interestingly, there is no unanimity as to the possible types of dislocation constructions in a single language. German is a case in point, where Frey (2004) for example employs the term German Left Dislocation (GLD), which corresponds to Dutch-type Contrastive Left Dislo-

cation (CLD), to draw the attention to the fact that the dXP in GLD is not contrastive, contrary to CLD. Conversely, [Grohmann \(2000\)](#) suggests a different taxonomy for German in that this language exhibits three types of left dislocation constructions: Contrastive Left Dislocation (CLD) and HTLD which comes in two flavors; I and II. [Nolda \(2004\)](#) further fleshes out an analysis, couched in the framework of Integrational Linguistics, arguing that Modern German has three constructions targeting the left periphery: Left Dislocation, Mixed Left Dislocation and Hanging Topic. All of these authors provide a battery of arguments to account for the proposed taxonomy, but given the lack of space, it is beyond this work to discuss their contributions, and thus the reader is referred to the cited works for discussion. At any rate, what I want to stress is the fact that coining new terms to describe a certain phenomenon is closely correlated with the morphosyntactic system of a language under consideration in addition to pragmatic, intonational and information-structural properties. Pending a settled-down unanimity on the possible logical variations of dislocation constructions cross-linguistically, I then adopt the four types pointed out earlier as an exhaustive representation of clitic-resumed constructions in Arabic. In what follows, I provide the rationale for this taxonomy.

## 2.5.2 Justifying the taxonomy

As pointed out in section [2.3.2](#), there are two poles of thought characterizing clitic-resumed elements in the Arabic left periphery: (i) Arabic has only CLLD I ([Aoun and Benmamoun 1998](#); [Aoun et al. 2010](#)) (ii) Arabic has only CLLD II ([Abd al Ra'uf 1998](#); [Lyassi 2012](#)). Appealing though those proposals may be, neither one is tenable under empirical scrutiny. Specifically, I argue that Arabic has both CLLD I and CLLD II. The same holds true for the right periphery, where I maintain that there are CLLD I/CLLD II-analogous constructions targeting the Arabic right periphery: CLRD I/ CLRD II respectively.

### 2.5.2.1 The left periphery: CLLD I vs. CLLD II

In the original treatment of clitic-resumed elements, [Cinque \(1983, 1997: 97\)](#) adopts a strict pattern in describing the borderline between CLLD I and CLLD II. By implication, this would extend to CLRD I and CLRD II in the right periphery as well. He writes:

If a sentence displays a property which is unique to construction  
A (i.e. incompatible with construction B) we predict that, under



any manipulation, that sentence will be incompatible with all the other properties which are unique to construction B (and will be consistent with all the properties which are unique to construction A).

Recall that CLLD I displays some properties which set it apart from CLLD II. The phrasal type of the dXP is a case in point where CLLD I can be any phrasal category; verb phrase, adjective phrase etc. (Cinque 1990; Villalba 2000). According to the quote above, this property must be correlated with other properties characteristic of CLLD I such as the presence of connectivity effects, islands sensitivity, the possibility of recursion of dXPs and the obligatory presence of a weak pronominal in the host clause which relates to the dXP. Aoun and Benmamoun (1998) and Aoun et al. (2010) though, notes that the dXP in CLLD I in Arabic can be only a NP. According to these authors, this is uniformly the case for CLLD I in Arabic owing to the fact that “there are no clitics that correspond to another type of phrase”. But, this is just one diagnostic of CLLD I. On the compatibility approach noted in the quote above, this is perplexing since we cannot tell what kind of construction we are dealing with. In particular, only CLLD II is limited to NPs and if Cinque’s diagnostics are taken strictly, one is hard pressed to claim that Arabic has only CLLD I.

On the other hand, Lyassi (2012) claims instead that Arabic has only CLLD II. Specifically, she takes the diagnostics introduced by Cinque (1990) for CLLD I and CLLD II as clear-cut pointing to the conclusion that Standard Arabic has only CLLD II, in contrast to the analysis advanced by Aoun and Benmamoun (1998) where it is argued that Standard Arabic employs exclusively an Italian-type CLLD I. After reviewing all of Cinque (1990)’s diagnostics to distinguish between CLLD I and CLLD II, she concludes that CLLD I is not a possible option in the Arabic syntax since the data provided supports a CLLD II analysis.

The problem with these authors, however, lies in their definitive conclusion that Arabic does have either CLLD II or CLLD I, without considering a third option. Interestingly, the recurrent dilemma which strikes me as surprising is that *almost* all of the previous proposals with respect to the left periphery in Arabic fail to appreciate the distinction which is typically made in the generative literature between two broad configurations: CLLD II and CLLD I.<sup>11</sup> Un-

<sup>11</sup>Indeed, ignoring the distinction between CLLD I and CLLD II seems to be prevalent in the literature on Arabic syntax. For example, Demirdache and Percus (2011: 335, fn.1) makes a distinction between Topicalization and Dislocation in Standard Arabic: while there is a case symmetry in the former, there is not in the latter. This is schematized as the following:

1. Topicalization: XP-ACC [Subject Verb]

fortunately, the previous proposals, interesting as they may be at first blush, suffer from the same problem. In particular, they assume incorrectly that MSA does have either CLLD I or CLLD II, but not both. This is not accurate, however. To show that this is the case, I provide one crucial argument.

As far back as Arabic traditional grammarians, it has been noted that the direct object as in (45) can be case-assigned either nominative or accusative when it undergoes topicalization as in (46).

- (45)    *ʃahtu al-bint-a*  
           see-1S the-girl-ACC  
           'I see the girl'

- (46)    a.    *al-bint-u, ʃahahtu-ha*  
                   the-girl-NOM see-1S-her  
                   'I saw the girl'
- b.    *al-bint-a, ʃahahtu-ha*  
                   the-girl-ACC see-1S-her  
                   'I saw the girl'

(Obiedat 1994: 311)

---

## 2. Dislocation: XP-NOM [subject Verb RP-ACC]

Accordingly, the authors flesh out an analysis according to which the absence of case matching in dislocation means that it is not the antecedent of the clitic that moves, but rather the clitic itself does (I argue in section 4.2.1.1 against analyses of this ilk). Apart from the terminological confusion, they do overlook the fact that Arabic has a third construction which is similar to (1) but with a clitic instead of gap (i.e. CLLD I). Similarly, Ayoub (1981) cited in Shlonsky (2000: 329, fn.1) claims that the difference between the sentences depicted in (a) and (b) can be accounted for by assuming a dichotomous partition between focalization and topicalization.

- a.        \*Zayd-an raayta aal-rajul alað daraba-(hu).  
             Zayd-ACC saw the-man-ACC that hit-([3MS])  
             'ZAYD, you saw the man who hit (him).'
- b.        Zayd-un raayta aal-rajul alað daraba-(hu).  
             Zayd-NOM saw the-man-ACC that hit-([3MS])  
             'ZAYD, you saw the man who hit (him).'

According to Ayoub, the sentence in (a) features Focalization, which is under the standard assumptions a class of *wh*-configurations and hence it is sensitive to islands as expected. By contrast, the insensitivity of (b) to islands is symptomatic of Topicalization. On the basis of this, Focalization is distinguished from Topicalization in that the former is derived by movement, while the latter is not (i.e. base-generation). The immediate objection to this is that focus is not typically resumed by clitics (Rizzi 1997) for the simple reason that clitics are inherently anaphoric referring to pre-established entities in the discourse. As it stands, this is at odds with focal elements denoting new information. Furthermore, the term topicalization is misleading here since this term is typically reserved for configurations where the topicalized dXP is not resumed by a clitic (Cinque 1983, 1997). Thus, the contrast between (a) and (b) can be interpreted in Cinquean's terms into CLLD I and CLLD II, which indeed can be distinguished on the basis of case (mis)matching: while CLLD I displays case matching, CLLD II doesn't. Further, Eyman Muhammed (p.c.), who is specializing in traditional Arabic theory, points out that the sentence in (a) is totally fine. I shall come back to the locality conditions in sections 2.5.5 and 6.4.4.

According to Obiedat, the sentence in (46a) is analyzed as a pronominalization process where the topic, though non-integrated to the host clause, is resumed by a clitic. The non-integrated nature of the topic in (46a) is evident from the fact that *'al-bint-u'* is case-assigned nominative although it is associated with a direct object position in the host clause. On the other hand, the sentence in (46b) is analyzed as the result of transformation process, the topic *'al-bint-a'* being integrated into the host clause. The integrated nature of the topic in (46b) is evident from the fact that the topic covaries with the clitic in that both bear accusative case.<sup>12</sup> Of great importance, though, is that to the extent that the traditional grammarians' characterization of topical expressions in Arabic is on the right track, the sentences in (46a) and (46b) can be translated in Cinquean's terms into two different categorical configurations: CLLD II and CLLD I respectively.

Interestingly, this taxonomic difference goes unnoticed in the previous treatments giving rise to a spurious conclusion that CLLD I does not share the same morphological case as the clitic.<sup>13 14</sup> The non-integrated status of the topic (46a), thus, can be accounted for by assuming that Arabic instantiates CLLD II, which is standardly characterized by there being a topical expression which appears in a default nominative case (i.e. *nominativus pendens*). This is not the

<sup>12</sup>Traditionally speaking, the early Arabic grammatical theory in the 11th century was shaped by two clashing schools of thought: Kufans and Basrans. In Owens (1990: 1ff)'s terms:

(i)n the standard tradition Arabic linguistic thinking is divided into three schools, the Basran, Kufan and Baghdadian, Basra and Kufa being the earliest islamic cultural centers in Iraq, and Baghdad the capital of the Abbasid empire. The classic presentation of this model was written by the twelfth century grammarian Anbari.

Importantly, Basrans' thinking can be characterized by "the fact that they developed a highly efficient method of grammatical analysis based on the use of analogy. With this they developed linguistic hierarchies that were used to classify and explain all aspects of Arabic grammar". Kufans, by contrast "relied to a greater degree on the citation of anomalous linguistic forms and textual examples in the analysis of a particular grammatical construction, used analogical reasoning to a lesser degree and generally attached less weight to strict methodological procedures in their argumentation". For a detailed historical overview, see Owens (1990: ch.10) among others.

<sup>13</sup>Interestingly, the same problem has been noted in Greek as well. In particular, Anagnostopoulou (1997: p.184, fn.5) maintains that Tsimpli (1992, 1995) does not distinguish between CLLD I and CLLD II giving rise to an incorrect conclusion: there is no case connectedness between the dXP and the clitic in Greek CLLD I.

<sup>14</sup>At this point, a caveat must be introduced. Ouhalla (1994a: 67) cites the two examples shown in (a) and (b) featuring what he dubs Left Dislocation (LD).

- a. al-jaay-a,    farib-tu-hu  
the-tea-ACC drink-1SG-it  
'The tea, I drank it'
- b. l-kitaab-a    gara?-tu-hu  
the-book-ACC read-1SG-it  
'The book, I read it'

case, however, with examples featuring CLLD I as shown in (46b), where the dXP covaries in morphological case with the clitic, pointing to the conclusion that the dXP gets case-assigned by a verbal element. Importantly, this entails that the dXP in CLLD is a part of the host clause at some point of the derivation.

Condition C is another piece of evidence to distinguish between CLLD I and CLLD II as the examples in (47) show: the degradedness of (47a) is due to the fact that the dXP is interpreted within the c-command domain of the *pro*, giving rise to a violation of Condition C (more on connectivity effects below). By contrast, this is not the case with CLLD II as in (47b), where no reconstruction effects are observed.

- (47) a. ?kitaba alyian<sub>i</sub> pro qarʔ-hu<sub>i</sub> albariha  
           book-ACC Ali-GEN pro read it-ACC last night  
           ‘He read Ali’s book’  
       b. kitabu alyian pro qarʔu-hu albariha  
           book-NOM Ali-GEN pro read it-ACC last night  
           ‘He read Ali’s book’

Importantly, there appears to be a correlation between (anti)-reconstruction and case (mis)matching insofar as the dXP in (47a) can reconstruct for the purpose of Condition C, while no such effects arise in (47b). The plausible explanation for this divergence is to assume that the example in (47a) constitutes a bonafide instance of CLLD I by virtue of case connectivity and thereby reconstruction is expected since this is a property of CLLD I. Conversely, anti-reconstruction is predicted to ensue in (47b) for the reason that we are dealing here with an instance of CLLD II, which typically does not display connectivity effects, thereby displaying anti-reconstruction effects.<sup>15</sup>

It is my contention that the source of confusion in Ouhalla’s treatment is terminological in nature. In particular, Ouhalla overlooks the fact that the construction known as Hanging Topic Left dislocation (the term is due to Alexander Grosu) is sometimes called “Left Dislocation”. A prime feature of this construction is that the dXP does NOT share the same morphological case as the clitic (Ross 1967; Cinque 1990; Anagnostopoulou 1997). Subsequently, unlike Ouhalla’s characterization, the examples in (a) and (b) are typically subsumed in the literature under CLLD I, a construction which displays different features from CLLD II (Left Dislocation, on Ouhalla’s proposal) such as case matching.

<sup>15</sup>Interestingly, Eyman Muhammed (p.c.) did not accept the co-reference reading: the interpretation of *pro* as coreferent with R-expression is unavailable for (47a) and (47b). To my ear, co-reference between *Ali* and the subject of the host clause (i.e. *pro*) is possible in (47b) under discourse circumstances which are required to realize this possibility. In particular, suppose that Ali is chatting with his friends about his latest books. One of his friends, however, spots some logical problems in the format of the book and utters the following sentence.

- a. laakn, hunakka baʕad<sup>ʕ</sup>u altahaafuð<sup>ʕ</sup>ati  
       but there some reservations  
       ‘But, I have some reservations’

In fact, these data pose a challenge for Aoun and Benmamoun (1998) and Lyassi (2012) in that the data show that CLLD I and CLLD II cannot be boiled down to a unitary phenomenon. If one assumes that both (47a) and (47b) are variations of CLLD I, then one would have to stipulate that CLLD I is connected to the host clause in *some* instances. This is not an attractive solution, though, since CLLD I from a cross-linguistic perspective shows connectivity effects (Cinque 1990; Villalba 2000). The unavoidable question then is how one can characterize case mismatching depicted in (47b). Note that Cinque (1990)'s bipartition into CLLD I and CLLD II rests typically on some syntactic diagnostics to differentiate between the two configurations – one of which is the fact that CLLD II, unlike CLLD I, does not exhibit case-connectivity.

The facts examined so far suggest the following statement:

(48) *Taxonomy of Clitic Constructions in Arabic (version I)*

[ A clause with a left-peripheral dXP and a coreferential clitic is an instance of CLLD I iff it shows a case-matching relation between a correlate and a dXP; Otherwise, it is taken as an instance of CLLD II].

#### 2.5.2.2 The Right periphery: CLRD I vs. CLRD II

As far as the right periphery is concerned, there is a strong piece of evidence which points out that the same dichotomy assumed to apply to the left periphery can carry over to the right periphery as well. This is a welcome result indeed since it captures a basic regularity underlying sentential peripheries in Arabic. Consider the following examples which illustrate cases of clitic right dislocation in Arabic.

- (49) a. Zurtu-hu,           Zaydan  
          visited.1SG-ACC Zayd.ACC  
          'I visited him, Zayd'
- b. Zurtu-hu,           Zaydun  
          visited.1SG-ACC Zayd.NOM  
          'I visited him, Zayd'

---

At this point, uttering the sentence depicted in (47b) in the main text, can be taken as an assertive response, meaning that the the author himself (i.e. Ali) has read the book carefully and has never found any reasoning problems which merit further attention. Another syntactic factor, such as case mismatching, may conspire for the availability of a co-reference reading in (47b): since the dXP is case-assigned nominative (i.e. the default case in Arabic), it is not expected that this dXP can be c-commanded by the subject of the host clause (i.e. pro) at any stage of the derivation, thereby obviating Condition-C effect.

As in the left periphery, both (49a) and (49b) have a pronominal clitic in their derivations, plus the dXP is limited to NPs. However, the two examples diverge in one important aspect: case connectivity effects are attested in (49a), but not in (49b). This dichotomy can be further reinforced by data involving Condition C. In particular, the degradedness of (50a) is due to the fact that the dXP is interpreted within the c-command domain of the *pro*, giving rise to a Condition C violation. By contrast, this is not the case with (50b), where no reconstruction effects are detected.

- (50) a. ?*pro qarʔ-hu<sub>i</sub>*    *albariha* ?*kitaba*    *alyian<sub>i</sub>*  
           *pro* read it-ACC last night book-ACC Ali-GEN  
           ‘He read Ali’s book’
- b. *pro qarʔ-hu*    *albariha* *kitab*    *alyian*  
           *pro* read it-ACC last night book-NOM Ali-GEN  
           ‘He read Ali’s book’

As noted earlier, it seems that there is a correlation between feeding Condition C and case-matching: while Condition C effects are correlated with case-matched dXPs, these effects are absent with case-mismatched counterparts (see footnote 14 above for a discussion on the conditions under which a co-reference reading for (50b) can be obtained).

Interestingly, the puzzling situation rears its head once again. In particular, [Villalba \(2000\)](#) argues at length that Clitic Right dislocation (CLRD) in Catalan shows connectivity effects and can be any phrasal category. The contrast in (50), however, says otherwise in that only (50a) display case connectivity, while both examples are limited to NPs. Indeed, this state of affairs is problematic for the approaches which take clitic-resumed configurations as a uniform phenomenon showing a set of *strict* properties. The question which arises now is how to deal with the facts examined so far? In particular, given [Villalba’s](#) diagnostics that CLRD is open to all phrasal categories and shows connectivity effects, Arabic proves to be different to that effect in that this language makes use of clitic right dislocation but not in a compatible way as understood by [Villalba](#). It is my contention thus that there is no reason *a priori* to assume that clitic right dislocation in Arabic is only limited to CLRD, but there is also an CLLD II-analogous construction, which I dub Clitic Right Dislocation II (CLRD II). Hence, Arabic has two constructions, which are parallel to the left periphery, targeting the right periphery: CLRD I and CLRD II. These constructions are similar in that (i) they are limited to NPs, and (ii) employ a clitic in the host clause. They, however, differ in that CLRD I exhibits connectivity effects.



The facts discussed so far uncover the following statement:

(51) *Taxonomy of Clitic Constructions in Arabic (version II)*

[A clause with a right-peripheral dXP and a coreferential clitic is CLRD I iff it shows a case-matching relation between a correlate and a dXP; otherwise, it is taken as an instance of CLRD II].<sup>16</sup>

### 2.5.3 Cinque's (1990): the question of crosslinguistic validity

Turning back to Cinque (1983, 1997)'s rigid characterization of topic constructions quoted in section 2.5.2.1, one would have difficulty assuming that Arabic data constitutes an exclusive instance of either CLLD I or CLLD II since both these configurations have a legitimate presence in the Arabic syntax. According to Cinque, topic constructions are uniform in nature; that is, if one environment displays a property of CLLD I, say connectivity effects or sensitivity to islands, all other properties hence MUST apply to that environment. My main qualm with this view, however, is that it presupposes a one-to-one correlation between a given syntactic phenomenon and structural diagnostics, which are basically tailored to a certain language, i.e., Italian (Cinque 1990). As rightly noted by López (2016: p.403), "we find broad similarities and fine-grained contrasts between languages" as far as dislocation is concerned. As is shown in Table 2.4, the diagnostics proposed to capture CLLD I, if taken strictly, cannot account for the complexities of crosslinguistic variation.

---

<sup>16</sup>This is not entirely a novel observation, though. For example, Takita (2014) distinguishes between two constructions targeting the right periphery in Japanese: pseudo-right dislocation (PRD) and "standard" right dislocation (SRD). According to Takita, PRD can be subsumed under Hanging Topic constructions found in Romance languages, since it neither reconstructs nor displays case-matching, among other properties which are arguably typical of Hanging Topics targeting the left periphery. Similarly, De Vries (2009a) makes a similar observation for Dutch where he argues at length that Dutch exhibits a construction dubbed Backgrounding Right dislocation (BRD), which is taken to be "the mirror image of HTLD [CLLD II]" in that there are not attested connectivity effects; a bonafide feature of Hanging Topics. As it stands, what this shows is that Clitic Right dislocation is not a unitary phenomenon.

Table 2.4: Comparison between MSA and Italian

The diagnostics for CLLD		
	MSA	Italian
The dXP can be any maximal projection	✗	✓
It is sensitive to strong islands.	✗	✓
The correlate must be a clitic	✓	✓
It can be iterative.	✗	✓
It shows connectivity effects.	✓	✓
The dXP can occur in both root and non root clauses	✗	✓

For the sake of argument, if one adopts such a strict view with respect to Arabic dislocation, one is forced to conclude, erroneously though, that Arabic does not have CLLD I/CLRD I nor CLLD II/CLRD II, since the dXP sometimes shows case connectivity (i.e. characteristic of CLLD I and CLRD I), yet it can be only NP (i.e. symptomatic of CLLD II and CLRD II). Indeed, this state of affairs lends support to the fact that properties underlying dislocation structures in Arabic must be reformulated. Before going into the details of my proposal in section, I pause a moment to see if there is crosslinguistic evidence lending support to these diagnostics.<sup>17</sup>

One asymmetry assumed to distinguish clitic dependencies is that CLLD I, unlike CLLD II, must employ a resumptive clitic in the host clause. This is not the case for Arabic as shown earlier, all dislocation dependencies being examined so far must instantiate resumptive clitics in their derivations. From a cross-linguistic perspective, this diagnostic is not always taken to be essential. [Pablos \(2006\)](#) for instance maintains that the Spanish sentence shown in (52) is unexpectedly an instance of what he dubs ‘clitic-less CLLD’.

- (52) En la estantería, Juan colocó el libro e  
 In the bookshelf, Juan placed the book  
 ‘In the bookshelf, Juan placed the book’

In (52), the dXP is related to a gap in the host clause (labelled here as e). Interestingly though, [Pablos](#) takes the position that this sentence is still a CLLD I articulation despite the absence of a resumptive clitic. This conclusion is reinforced by the assumption that clitic-less CLLD and the run-of-the mill CLLD in Spanish behave similarly as involving syntactic movement. The same is further documented in Spoken French where [De Cat \(2002: 100f\)](#) argues that

<sup>17</sup>Note that I assume that my critique of the properties underlying the distinction between CLLD I and CLLD II applies equally to their counterparts in the right periphery: CLRD I and CLRD II.



the presence of a resumptive clitic in French is not always required and “in some cases not even possible”. In particular, “when the dislocated element is interpreted generically, there is usually no resumptive (or if there is one, it is usually the [non clitic] pronoun *ç*”.

- (53) Les gâteaux<sub>i</sub>, [j’adore / j’adore ç<sub>i</sub>]  
 the cakes I-adore / I-dore that  
 ‘I love cakes’ (Not specific).

Interestingly, there is no unanimity in the literature as to whether the clitic is a special property of CLLD I. According to [Delaix-Roussarie et al. \(2004\)](#), the clitic is possible either in CLLD I or CLLD II. [Grohmann \(2000, 2003\)](#), however, argues that the correlate in CLLD II should be a non-clitic resumptive. As shown earlier, [Cinque](#) takes a balanced position in that the clitic is obligatory in CLLD I and is possible in CLLD II.<sup>18</sup>

On the basis of this, it is thus tempting to assume that the presence of a resumptive clitic or the absence thereof is not a clear-cut diagnostic for the characterization of clitic dependencies, given the fact that it is not enlightening with respect to the proposed taxonomy pointed out earlier (i.e. the presence of clitics in Arabic clitic dependencies does not give us a clue as to what kind of constructions we are dealing with since all configurations in MSA addressed so far employ a pronominal clitic), and not robust cross-linguistically to be an indispensable ingredient of dislocation structures.

Another asymmetry attested in the literature concerns root/non-root clauses. In particular, it is argued that only CLLD I (i.e. CLLD) can appear in both root and embedded clauses, while CLLD II (i.e. HTLD) is licensed in root clauses only. According to [Aoun et al. \(2010: p.192\)](#), this is the case for Arabic CLLD I as shown in (54): it can appear in embedded clauses.

- (54) zaʕamtu ʔanna r-risaalat-a a;-waladu kataba-ha  
 claimed.1s that the-letter-Acc the-boy-Nom wrote.3ms-it  
 ‘I claimed that the boy wrote the letter’

If one manipulates the sentence in (54) to be an instance of CLLD II, the result is downright ungrammatical, on the approach that CLLD II is licensed only

<sup>18</sup>To be precise, [Cinque \(1990: 71\)](#) notes that “resumptive clitics in [CLLD I] are all optional except for object clitics”. According to [Cinque](#), the obligatoriness of an object clitic is a consequence of the fact that no empty category (i.e. *pro*, PRO or trace), specified by the feature system [+/- anaphoric, +/- pronominal], can be related to a left-dXP. Further, these empty categories are barred in CLLD I for independent reasons (i.e. *pro* is not identified, PRO is governed and an NP trace, which is subject to Principle A of Binding theory, is unbound in its governing category).

in root clauses; the deviance of (55) follows straightforwardly by assuming that CLLD II resists embedding contexts, contrary to CLLD I cases of the type illustrated in (54).

- (55) \*zaʕamtu ʔanna r-risaalat-u al-waladu kataba-ha  
 claimed.1s that the-letter-Nom the-boy-Nom wrote.3ms-it  
 'I claimed that the boy wrote the letter'

This is only apparent, though. To show that this is the case, a short detour on how case in Arabic works. It is an invariant rule that the finite clause complementizer in Standard Arabic 'ʔanna' assigns accusative case to the NP that follows it. Another instance where the accusative case arises is when the nominal element is governed by a verbal assigner; this is the case with all instances of dXPs examined so far. Nominative case in this language is taken to be an 'everywhere' operation, in that it is taken as the default case in the absence of a case governor (Ouhalla 1994b).<sup>19</sup>

Although Aoun et al. (2010: p.192 fn.1) are aware of this fact, they make a spurious generalization that CLLD I in MSA can be licensed in embedded clauses. Indeed, the ungrammaticality of (55) cannot be attributed to the assumption that CLLD II is blocked in embedding contexts, but to the fact that finite clause complementizer requires the following NP be case-assigned accusative. A piece of evidence for this comes from the fact that if the dXP *r-risaalat-a* 'the letter' in (56) does not immediately follow the complementizer, it either shows a nominative or accusative case marking; i.e., it can be either CLLD II or CLLD I.

- (56) zaʕamtu ʔanna al-walad r-risaalat-[u]-[a] kataba-ha  
 claimed.1s that the-boy-ACC the-letter-[NOM]-[ACC] wrote.3MS-it

<sup>19</sup> Schütze (2001) proposes that the default case is a special operation of case-assignment which is applied to DPs when there is no structural case assigner in the sentence. In particular, "the caseless DP [...] survives to LF and PF, given that it never had any uninterpretable features that needed to be checked"; therefore, "no (PF or LF) crash is caused by the absence of case features on a DP" (p.207). The upshot of default case then is that some DPs (i.e. DPs which appear in the SPEC-TopicP for example) reach the morphological component or PF caseless, a certain operation then being applied to give this DP the default case, which differs depending on the language under discussion. The default case in Arabic is nominative and epitomized by preverbal DPs and predicates of verbless sentences (Al-Balushi 2011: p.107). This can be exemplified in (a) featuring a verbless sentence, the first part being assigned nominative case because it is interpreted as a topic expression, and the second part being assigned the same default case because it is a predicate of the whole proposition.

- a. ʔal-mudaris-u mariiD-un  
 the-teacher-Nom sick-Nom  
 'The teacher is sick'

'I claimed that the boy wrote the letter'

On the other hand, this property is not homogeneous cross-linguistically. For instance, [Ross \(1967: 234\)](#) maintains that CLLD II and Topicalization cannot occur in subordinate subject clauses, contrary to certain subordinate object clauses in which both constructions are possible. By contrast, [Lasnik and Saito \(1992: 193, fn.7\)](#) note that CLLD II is possible in subordinate clauses. [Escobar \(1997: p.248\)](#) cites some Spanish examples of CLLD I, where the possibility of embedding is zero in *some instances*. In particular, the Spanish dXPs in a CLLD I articulation cannot be embedded with verbs of subjunctive mood as in (57) and relative constructions as in (58).

- (57) \*ella prefiere que a Luis, el médico lo examine  
she prefers that Luis.ACC the doctor ACC-CL examines  
'She prefers that Luis be examined by the doctor'
- (58) \*el estudiante que los problemas los solucionó  
the student that the problems ACC-CL (he) solved  
'The student who solves the problem'

As pointed out by [Escobar](#), this state of affairs can be taken as a convincing argument that CLLD I is a root phenomenon, just similar to CLLD II.<sup>20</sup> It follows then that this property is not helpful in deciding between CLLD I and CLLD II in Arabic, since the impossibility of Arabic CLLD II in embedding contexts, as in (55) for example, is closely related to the morphosyntactic needs of finite clause complementizers, not to CLLD II itself. Once this condition is controlled for, CLLD I and CLLD II can appear in embedded clauses as in (56). Under careful scrutiny, moreover, it appears that some instances of CLLD I in

---

<sup>20</sup>It should be pointed out that [Escobar \(1997: p.247\)](#) questions [Cinque \(1990\)](#)'s claim that CLLD in Italian may occur in virtually any subordinate clause as in (a), arguing that her Italian informants prefer that the left dXP precedes the *wh*-phrase as in (b).

- a. Non so proprio chi, questo libro, potrebbe recensirlo per domani  
I don't know who this book could review it for tomorrow
- b. Non so proprio questo libro, chi potrebbe recensirlo per domani  
I don't know this book who could review it for tomorrow

Spanish can be taken as a root phenomenon on a par with CLLD II.<sup>21</sup>

Another difference between CLLD II and CLLD I, which is not listed in Table 2.1, is that the dXP in the former is separated from the host clause by an intonational break, while such pause is absent in CLLD I. "Although the [dXP] .. in [CLLD I] is separated from the clause that follows it via a comma, the intonational break between the two is much weaker than that present in [CLLD II]" (Alexiadou 2006). Admittedly, this is the most delicate property used to distinguish between CLLD I and CLLD II. For one thing, prosodic research is riddled with interspeaker variations (Kim 2015), whereby " (e)very time a word is produced, it is uttered by different people in different contexts, with varying duration and amplitude". The same observation can carry over to clitic-dependencies as well in that it is unlikely that a speech community of a given language is expected to utter CLLD I and CLLD II articulations in a fixed and pre-established fashion, since this is regulated by linguistic and extra-linguistic factors. On the other hand, as will be pointed out in the next chapter, the discursive properties of the Arabic dXPs partaking in clitic dependencies provide further evidence that the prosodic criterion is not sufficient for the identification of dislocation structures. Specifically, it is contrastiveness that underlies the interpretations of all dXPs co-occurring with resumptive clitics: all clitic-resumed dXPs in Arabic are interpreted as contrastive, which means that there is not a distinct pitch contour which can distinguish clitic dependencies in Arabic, i.e., they all denote contrastiveness. Crucially, this is not taken to be a blank statement that individual variation in terms of prosody and intonation cannot be studied; see Feldhausen (2010); Frey (2004). I am not aware of works investigating the prosodic manner of Arabic dislocation constructions, and hence I tentatively conclude, pending future work, that prosody is not of much help in distinguishing clitic-resumption constructions.

---

<sup>21</sup>As discussed by López (2009: 6), the ungrammaticality of CLLD II in subordinate clauses is not uniform cross-linguistically. Occitan is a case in point, where Lahne (2005) presents some data which are judged grammatical by her subjects. López prefers to remain agnostic about this, though, preferring to stick to the assumption that " in the general case CLLD II in subordinate clauses gives rise to some degree of ungrammaticality". Further, French is another language which seems to accept both CLLD I and CLLD II in subordinate clauses as shown at length by De Cat (2002, 2007). Apart from this, some scholars take the possibility of topicalization, *qua* root phenomenon, to appear in subordinate clauses as an indication that this configuration can partake in what is dubbed 'embedded root clauses' (Emonds 2004). Given the fact that this area is a field of inquiry on its own, discussing it any further will takes us too far afield. Consequently, I assume instead that the dichotomy embedded-root clause is not a trustworthy diagnostic to distinguish clitic-resumed configurations in MSA. For a comprehensive discussion of 'embedded root clauses', the reader is referred to Heycock (2006).

The final difference, which is argued to distinguish between CLLD I and CLLD II in the literature, is that a number of stacked dXPs can be grouped together at a time in the former, but this is not the case for the latter. This is known as ‘recursion’ in the dislocation literature. [Aoun et al. \(2010: 193\)](#) cite an example from Lebanese Arabic as shown in (59), arguing that CLLD I in this language can be recursive, following [Cinque \(1990\)](#).

- (59) kariim zeina ʕarrafnnee-ha ʕal-ee  
 Karim Zeina introduced.1p-her to-him  
 ‘Karim, Zeina, we introduced her to him’

According to [Aoun et al.](#), this sentence is a CLLD I structure since it displays recursion: there are two dXPs ( i.e. Kariim and Zeina) which are related to resumptive clitics in the host clause. In fact, I do not question the grammaticality of the sentence, but I have reservations to do with their definitive position that the sentence in (59) is an instance of CLLD I. These reservations can be summed up in two points. First, that recursive dXPs are a property of CLLD II not CLLD I has been argued to be the norm ([Escobar 1997: 245](#)). Second, Arabic dialects, such as Lebanese Arabic, are known to not mark nouns morphologically with case endings, and thus it is difficult to evaluate sentences of the type shown in (59) in terms of whether or not the dXP displays case connectivity; a crucial property employed in the literature in the partitioning of clitic dependencies. Second, it seems that accumulating more than one dXP is a marked option in Arabic, since this does not seem to apply to other Arabic dialects. According to my consultants, who represent Gulf Arabic, constructing an example in naturally occurring contexts analogous to the sentence in (59) is not that easy, and it makes sense thus to assume that the presence of stacked dXPs is rather uncommon in Arabic dialects other than Lebanese Arabic. Given these considerations, it can be concluded then that recursiveness is not an exclusive property of either CLLD I or CLLD II. Pending further research, I submit thus that this property is not indicative enough to be a distinguishing factor in the partitioning of clitic dependencies in Arabic.

It should be noted, moreover, that Arabic is not the sole language which diverges from the Cinquean’s characterization of ‘topic constructions’. Spoken French is a case in point, where the dXP does not reconstruct, nor shows connectivity effects, and at the same time can be related to the corresponding

clitic with a strong island.<sup>22</sup> Despite all of these properties, which are characteristic of CLLD II, it is argued that Spoken French instantiates only CLLD I. In particular, [De Cat \(2007: 108\)](#), maintains that the distinction between CLLD I and CLLD II in Spoken French cannot be established on a “reliable empirical base”, lending support to [Cinque \(1977\)](#)’s earlier assertion that “in many cases, it is not simple to decide what construction we are observing”. Crucially, this will cast doubts as to whether we are dealing with CLLD I or CLLD II especially in languages which suppress morphological marking on nouns, rendering the distinction between the two configurations at issue rather indistinguishable. Further, in his analysis of CLLD I in Zulu, a Southern Bantu language, [Zeller \(2004, 2005\)](#) notes that some of the diagnostics proposed to distinguish between CLLD I and CLLD II are not informative to disambiguate left dislocation constructions in Zulu. In particular, after his discussion of three properties (i.e. recursiveness, root/non-root clauses and the clausal category of dXP), he concludes that these properties are not indicative of anything and hence “it seems premature to draw any conclusions about the nature of left dislocation constructions in Zulu”. Alternatively, he takes binding relations and connectivity effects as a point of departure, arguing that these present evidence in favor of CLLD I in Zulu.

To wrap up, all approaches that propose a strict correlation between certain diagnostics and clitic dislocation constructions are bound to fail given cross-linguistic variations. For these approaches to hold water, detailed legwork must be undertaken to prove that CLLD I and CLLD II for example are tightly correlated with [Cinque](#)’s and [Villalba](#)’s diagnostics cross-linguistically. In fact, the problem for these proposals adopting such a correlation is they judge as CLLD I anything which does not conform with what we believe about CLLD II; see [De Cat \(2002, 2007\)](#) for a view along these lines. As it stands, this view falls short of accounting for the data from Arabic dislocation, which as we saw earlier, can display the properties of CLLD I and CLLD II in a single articulation (i.e. displaying connectivity effects, while the dXP is exclusively a nominal XP). Since there is no theory-independent reason to assume that [Cinque](#)’s and [Villalba](#)’s diagnostics are cross-linguistically valid, one then has to find a way out to diagnose clitic dependencies in Arabic.

---

<sup>22</sup>In the same vein, [Bouzouita \(2014\)](#) argues that Old Spanish does not conform to [Cinque \(1990\)](#)’s properties of dislocation constructions, and hence the distinction between CLLD I and CLLD II cannot be maintained.

## 2.5.4 The proposal

The optimal path to follow concerning Arabic clitic configurations, I argue, is to relax Cinque's traditional characterization of topic constructions along with concomitant diagnostics. In particular, the non-applicability of a given diagnostic in one context should not be translated deterministically into the absence of a certain phenomenon.<sup>23</sup> Consequently, this means that in the presence of a right/left-peripheral nominal XP which shows connectivity effects, the best strategy to be adopted is to simply say that this language, say Arabic, does allow for CLRD-ed / CLLD-ed elements to behave in this way. In other words, to rescue Cinque's bipartition into CLLD I and CLLD II, a parametrized option with regard to dislocation properties must be allowed to account for Arabic data which do not seem to conform closely with structural diagnostics typically proposed to capture the distinction between CLLD I and CLLD II. It is necessary thus to find an encompassing criterion which makes clitic dependencies stand out from each other. In so doing, I propose a modification to Cinque's and Villalba's approaches where the decisive factor between CLLD I/CLRD I on one hand and CLLD II / CLRD II on the other is whether or not the dXP is connected to the host clause.

On the basis of this the following statement holds:

(60) *Taxonomy of Clitic Constructions in Arabic (Final version)*

[A clause with a right/left-peripheral dXP and a coreferential clitic is CLLD I/CLRD I iff it shows a case-matching relation between a correlate and a dXP; otherwise, it is taken as an instance of CLLD II/CLRD II]<sup>24</sup>

---

<sup>23</sup>To be more precise, this is not meant to be a blanket statement; if so, this statement ends up saying that the theory makes no predictions at all. Thus, this statement should be understood only in the context of clitic-resumed configurations.

<sup>24</sup>Like other preliminary generalizations proposed in the main text, this generalization is inspired by Frey (2004: 206) in his discussion of the differences between German Left dislocation (CLD) and Hanging Topic Left Dislocation (HTLD). In particular, given the highly delicate nature of diagnostics taken to decide between GLD and HTLD, he instead proposes the criterion shown in (a) to capture the distinction between GLD and HTLD, which is rooted in binding relations (i.e. operator binding, Principle C-effects etc.)

- a. The construction under consideration is an instance of GLD if, and only if, it allows a binding relation between an element of the clause and an element inside the dislocated phrase.



#### 2.5.4.1 A note on connectivity effects

A particularly crucial difference between CLLD I and CLLD II in MSA is the presence vs. absence of connectivity effects. In this respect, two classes of connectivity effects have been considered so far: case-matching and bound R-expressions (Condition C). The question which may arise: what about other classes of connectivity effects viz; bound anaphora (condition A) and bound variables?<sup>25</sup> The long and the short of my answer is that *these classes of connectivity effects are orthogonal to the identification of clitic-resumed constructions in MSA*. To see why, a short detour is in order. To begin with, Principle A of Binding Theory states that a reflexive pronoun be c-commanded by an antecedent, as exemplified in (61)

- (61) a. Mary likes herself.  
b. \*herself likes Mary.

The subject in (60a) ‘*Mary*’ c-commands the anaphor ‘*herself*’, in agreement with Principle A, giving rise to a well-formed sentence, contrary to (60b), where it appears that Principle A is not met (i.e., c-command relations are not established properly for the reflexive pronoun to be bound).

Let us now turn to Arabic data. Consider the example in (62), a canonical predicate-argument configuration, where the anaphor is bound by the antecedent.

---

<sup>25</sup>Idiomatic interpretation, a prime class of connectivity effects, is not considered in the main text for the reason that it doesn’t hinge on the c-command relation (Marantz 1984; Anagnostopoulou 1997). Specifically, as originally pointed out by Soltan (2007: 58), idiomatic readings are not available in CLLD II (‘Left Dislocation’ in his account) as shown in (b).

- a.       sahab-tu /al-busaat-a min taht qadamay-hi  
          pulled.1SG the-rug-ACC from under feet-DAT-his  
          Literal and Idiomatic: “I pulled the rug from under his feet.”  
b.       al-busaat-u sahab-tu-hu min taht qadamay-hi  
          the-rug-NOM pulled-1SG-it from under feet-DAT-his  
          Literal reading only: “I pulled the rug from under his feet.”

Interestingly, even if one manipulates the sentence in (b) to be a CLLD I articulation, lack of idiomaticity persists.

- a.       al-busaat-a sahab-tu-hu min taht qadamay-hi  
          the-rug-ACC pulled-1SG-it from under feet-DAT-his  
          Literal reading only: “I pulled the rug from under his feet.”

As it stands, what this shows is that idiom chunks *qua* a diagnostic to distinguish between CLLD I and CLLD II (Anagnostopoulou 1997; Grohmann 2003) is not enlightening, due to the fact that idiomatic interpretation is not attained in either CLLD I or CLLD II owing to a semantic constraint which blocks idiomaticity in the presence of anaphoric clitics, *pace* Aoun and Benmamoun (1998) & Soltan (2007). I shall come back to this issue in section 5.4.1.



- (62) Aliun yuhibu nafsahuu  
 Ali-NOM love-3SG himself-ACC  
 'Ali loves himself'

Now, consider the following examples in (63) where the anaphor is left-dislocated and case assigned nominative as in (63a) (i.e. CLLD II) and accusative as in (63b) (i.e. CLLD I).

- (63) a. \*nafs-uu-hu Ali-un yuhibu-ha  
 self-NOM-him Ali-NOM love.3SG-him.ACC  
 The indented meaning 'Ali loves himself'  
 b. \*nafs-aa-hu Ali-un yuhibu-ha  
 self-ACC-him Ali-NOM love.3SG-him.ACC  
 The indented meaning 'Ali loves himself'

Under the standard assumptions on CLLD I and CLLD II (Cinque 1990; Cecchetto 2000; Escobar 1997), this state of affairs is surprising since CLLD I, unlike CLLD II, is uniformly argued to involve reconstruction for the purpose of Condition A, but this is not the case for MSA.

Another class of connectivity is when “(a) pronoun embedded in a [CLLD I] constituent can be bound by a quantifier in subject position” (López 2009: 220). This implies that the dXP has been in the c-command domain of the quantifier at some point in the derivation. To be concrete, consider the following example taken from López (2009: 220)

- (64) A su hijo, ninguna madre lo quiere castigar.  
 A her son no mother CL-ACC wants punish.INF  
 'Her son no mother wants to punish'

Superficially, the sentence in (64) should be analyzed as ungrammatical given that it is not in agreement with Reinhart (1983)'s Bound Anaphora Condition (BAC)<sup>26</sup> according to which the pronoun can receive a bound reading only if it surfaces in the c-command domain of an operator (i.e. *wh*-words, quantifiers etc.). However, the sentence turns out to be grammatical. The explanation for this is that the dXP along with the embedded possessive pronoun moves and leaves a silent copy for the quantifier to bind in the original position, giving rise to a well-formed sentence. Thus, the sentence in (64) has the following LF-structure.

<sup>26</sup>Reinhart (1983: 122)'s Bound Anaphora Condition (BAC) is originally expressed as “(q)uantified NPs and *wh*-traces can have anaphoric relations only with pronouns in their c-command syntactic domain”

- (65) [A her son] no mother<sub>i</sub> CL wants punish [A her<sub>i</sub> son]

The situation in Arabic, however, proves once again to be strict with respect to the possibility of bound reading of pronouns embedded in CLLD I and CLLD II articulations. In particular, for the pronouns to be bound by an operator, they must be in the c-command domain of an operator in the surface structure. Consider the following example:

- (66) kul fatatin tuhibu abyha  
 Every-NOM girl-GEN loves.3SG her father-GEN  
 'every girl loves her father'

The bound reading of the object pronoun 'her' in (66) is easily obtained because the pronoun is c-commanded by the operator or its trace if we assume that the quantifier should move upward for the purpose of scope (i.e. Quantifier Raising QR). Now, consider the examples in (67a) and (67b) involving CLLD I and CLLD II, respectively.

- (67) a. \*abahaa kul fatatin tuhibu-hu  
 Her father-ACC every-NOM girl-GEN loves CL  
 Intended meaning 'every girl loves her father'  
 b. \*abuhaa kul fatatin tuhibu-hu  
 Her father-NOM every-NOM girl-GEN loves CL  
 'every girl loves her father'

In (67a,67b), the bound reading of a pronoun in CLLD contexts is obviated for the reason that the pronoun 'her' is not c-commanded by the quantifier, in violation of BAC.<sup>27</sup>

The picture emerging from the discussion so far points out that some connectivity effects are not observed in dislocation constructions in MSA. The question is why? Stated so simply, I assume that 'the indislocability' of anaphors and phrases containing bound variables is attributed to the assumption that these constructions MUST be licensed at S-structure in Arabic, i.e. "they cannot be licensed under reconstruction"; see [Dikken et al. \(2000\)](#); [Ott \(2015: fn.46\)](#) on the licensing of Negation Polarity Items (NPIs). Following many works e.g., [Gary and Gamal-Eldin \(1982\)](#) cited in ([Eubank 1989: 48](#)), I assume that "Arabic [MSA] allows only forward anaphora". But see [Osman \(1990\)](#) on Egyptian

<sup>27</sup>According to [Vat \(1983, 1997: 70\)](#), which is taken to be one of the earliest contributions in the literature on connectivity effects in left dislocation constructions, note that the judgment of data involving bound pronouns in left dislocation constructions is "highly subtle and often murky."

Arabic.<sup>28 29</sup>

All in all, what I want to stress at this point is that the classes of connectivity effects are not uniform in MSA: while Condition C and case-(mis)matching can be used as enlightening tests to probe into the exact determination of a left-dislocated construction (CLLD I vs. CLLD II), other kinds of connectivity effects are argued to say nothing for reasons having to do with the morphosyntactic system of MSA: the fact that bound anaphora and bound variables must be licensed at S-structure, regardless of whether the dXP is case-assigned accusative (CLLD I) or nominative (CLLD II).

### 2.5.5 What about islands?

Before concluding the chapter, I would like to address a potential question which may arise: what is so special about case connectivity effects to stand out as the only diagnostic to distinguish clitic dependencies in Arabic? Recall that in section 2.3.1 I showed that while CLLD I is sensitive to islands, this is not the case for CLLD II. Thus, (in)sensitivity to islands should be taken into account as a determining property underlying clitic dependencies in Arabic. But the problem with locality conditions in the dislocation literature is their inconsistent behavior. Cinque (1990) for example argues that CLLD I is sensitive to strong islands but not weak islands. This observation, however, is challenged

---

<sup>28</sup>This behaviour can be connected to a grammatical constraint underlying some languages including MSA. More specifically, as far back as Langacker (1969) & Hankamer and Sag (1976), it is argued that there is what is dubbed a 'Backward Anaphora Constraint', the upshot of which is that linking an anaphor to an antecedent is impossible if the former precedes the latter (i.e. the anaphor must be c-commanded by the antecedent at the surface structure, *viz.*, reconstruction is not involved). According to Hankamer and Sag (1976: p. 394):

This position assumes that all anaphors (pronominal or null) are present in underlying representations, and that no anaphors are derived transformationally. The anaphoric relation between an anaphor and its antecedent is assumed to be established by an interpretive rule, this interpretation taking place at a relatively superficial level.

<sup>29</sup>This point is very much strengthened if one includes constructions, other than CLLD I and CLRD I, which exhibit an anti-reconstruction effect in MSA as far as anaphor binding is concerned. Focus is a case in point as the contrast in (a-b) shows: the anaphor must be c-commanded by its antecedent at S-structure.

- a. \*NAFS-I raʔtu fi al-mirʔah  
self-my saw.1SG in the mirror.  
'I saw myself in the mirror.'
- b. raʔtu NAFS-I fi al-mirʔah  
saw.1SG self-my in the mirror  
'I saw myself in the mirror.'

by [López \(2009: 5\)](#) where it is argued that CLLD I in Catalan is sensitive to weak islands as well. According to [López](#), [Cinque](#) considers only a subset of elements which can be easily extracted: definite object DPs; as evidenced in (68): definite dXP in CLLD and *wh*-configuration can be related to its clitic across a factive island (i.e. weak island).

- (68) a. Aquest llibre, em penedeixo d'haver-lo llegit.  
           this book CL.DAT regret.1ST of 'have.INF-CL.ACC read  
           'I regret having read this book.'
- b. Quins llibres et penedeixes d'haver llegit?  
           which books CL.DAT regret of 'have.INF read.PTC  
           'Which books do you regret having read?'

By contrast, if one constructs an example involving an indefinite dXP, "extraction across a weak island sounds a lot worse" (ibid :6). This is illustrated in (69).

- (69) ??D'histories, m' avergonyeixo d'haver-ne explicat diumenge.  
           of 'stories CL.DAT shame.1ST of 'have.INF told Sunday  
           'I'm ashamed to have told stories on Sunday.'

[López](#) concludes that once these confounds are taken care of, CLLD I seems to be sensitive to weak islands as well.

That CLLD I is sensitive to strong islands is not always supported cross-linguistically either. [De Cat \(2002: 104f\)](#) reports examples from Spoken French where the dXP-clitic relation can be separated by a strong island.

- (70) Les autres, je vais attendre avant de les relire  
           the other I will wait before to them re-read  
           'I will wait before reading the other ones again' Adjunct Island
- (71) Plastic Bertrand, j'ai tous les disques qui l'ont rendu célèbre  
           Plastic Bertrand I have all the records that him have made famous  
           'I have all the records that made him famous' NP Complex Island

The same is true for Moroccan Arabic (72), where it is argued that CLLD I is not sensitive to strong islands in this language.

- (72) Karim rewwju ši ddiʕaʔat billa nadia derbatu  
           Karim, circulated-3P some rumors that Nadia hit-3FS-him  
           'Karim, (they) circulated some rumors that Nadia beat him'

([Lalami 1996](#))

More puzzling, [Rubio Alcalá \(2014: 2\)](#) cites some examples featuring CLLD

I in Spanish, where the relation between the dXP and its associated clitic across a strong island can be grammatical in one context but ungrammatical in the other.

- (73) a. \*A Pedro, conocemos al espía que lo traicionó  
 Pedro, we know the spy who CL-him betrayed  
 'We know the spy who betrayed Pedro.'  
 b. A Pedro, el médico que lo atendió le dijo que  
 Pedro, the doctor who CL-him tended to CL-him told to  
 volviera mañana  
 come back tomorrow  
 'The doctor who tended to Pedro told him to come back tomorrow.'

Complex NP constraint

- (74) a. \*A Pedro Juan se fue antes de hablarle  
 Pedro Juan left before speaking CL-him  
 'Juan left before speaking to Pedro'  
 b. A Pedro, Juan le dio dos besos antes de hablarle  
 Pedro, Juan CL-him gave two kisses before speaking-CL-him  
 'Juan gave Pedro two kisses before speaking to him'

Adjunct island

All in all, given these considerations, it is too premature to deal with cases of islands (in)sensitivity as being indicative of the presence of a given construction or the absence thereof.

## 2.6 Conclusion

In this chapter I have explored and examined clitic-resumed constructions in MSA. In particular, I argued that the left periphery in this language can host two salient configurations: CLLD I and CLLD II. Similarly, two analogous constructions are argued to target the right periphery: CLRD I and CLRD II. In the next chapter I will zoom in on the information-structural properties of both CLLD I and CLRD I. This is crucial move, indeed, as far as the locality conditions are concerned. As shown earlier, MSA is not straightforward to this effect. The question is how can we account for the fact that the strong islands are uniformly transparent for CLLD I, but selectively opaque for CLRD I in MSA?. To answer this question, I will first take up the information-structural import of dXPs in MSA in chapter 3. Anticipating the discussion, the deter-

mining factor underlying the interpretation of dXPs in MSA is the resolution of a relevant Question Under Discussion (QUD). This discursive mechanism turns out to have an explanatory force in explaining the intricacies of the locality conditions attested for CLLD I and CLRD I in MSA. This will be the core aim of section 6.4.

Importantly, I do not discuss CLLD II and CLRD II again in this thesis for the reason that there is unanimity in the literature that these configurations, to the exclusion of CLLD I and CLRD I, do not pose a paradox from syntactic as well as pragmatic viewpoints: they are uniformly taken to be a topic-marking strategy, but see (Law 2003), and derived uniformly by a base-generation operation. See Van Riemsdijk (1997); Frey (2004); Grewendorf (2008) for a discussion on CLLD II. As far as CLRD II is concerned, the reader is referred to De Vries (2009a); Takita (2014).

## Chapter 3

# Dislocation and Information Structure

### 3.1 Introduction

It is typically assumed that dislocation in natural languages has an information-structural import in that dXPs must correspond to information-structural notions such as topic and focus. In particular, it has been argued that left-dXPs are usually interpreted as topic expressions ([De Cat 2007](#): p.64 and references therein). On the other hand, right dXPs are thought to either denote given or focal information ([Ott 2017](#)). From a crosslinguistic angle, this is not the whole story though. In particular, languages differ in how to encode dXPs from an information-structural perspective. In Romance languages, for instance, dXPs are thought to be contrastive topics ([López 2016](#)), but others contend that left-peripheral elements can be contrastive focus. See [Ott \(2015](#): p.281 and references therein).

The question of information structure partitioning is a vast topic, which is replete with disagreements; see [Kruijff-Korbayová and Steedman \(2003](#): p.254) for a nice overview. As far as topics are concerned, their identification proves to be "a notoriously difficult task" ([Constant 2014](#): p.2); to the extent that [Polinsky \(1999\)](#) puts that scholars seem to "[give up] on a definition of topic" ([Casielles-Suárez 2004](#): p.16); see also ([Reinhart 1981](#); [McNally 1998](#)). Crucially, this thesis will make certain theoretical commitments with the respect to the definition of topics, to be reviewed in section. As for focus constructions, there seems to be an unanimous view that focus expresses new information. There is, however, one type of focus construction *viz.*, contrastive focus, which is thought to denote salience and givenness in the interpretive sense. See [Horvath](#)

(2000) and subsequent work.

The crucial claim of this chapter is that contrast is the defining property of Arabic dislocation; while contrastive topics target the left periphery, contrastive focus appears in the right periphery. Most important, this claim, as I show in section, will have a non-trivial impact on the interpretation of so-called 'atypical topics', such as indefinites and quantified NPs. Further, this position turns out to have an explanatory force in explaining the intricacies of the locality conditions attested for CLLD I and CLRD I to be reviewed in section: the assumption that the dXP must be a felicitous answer to a relevant Question Under Discussion. If this condition is not met, the locality violations are expected to ensue.

The rest of this chapter is structured as follows: section 3.2 reviews the previous information-structural characterizations of left-peripheral elements. Section 3.3 is concerned with the proposal that what underlies the interpretation of CLLD I and CLRD I is contrast. Section 3.4, which constitutes the bulk of the chapter, takes on those dXPs, which are typically thought to resist left dislocation with an information-structural import at first sight, where I argue that these elements can be CLLD I-ed under a contrastive reading. Section 3.5 concludes.

## 3.2 The information-structural characterization of left dXPs

Before going into the details of this sections, two comments are in order. First, I assume in line with (Krifka 2008: p.265) that "the topic constituent identifies the entity or set of entities under which the information expressed in the comment constituent should be stored in the [Common Ground] content". As an illustration, consider the following examples, taken from Krifka (2008).

- (1)    a. [TOPIC Aristotle Onassis ] married Jacqueline Kennedy.  
      b. [TOPIC Jacqueline Kennedy] married Aristotle Onassis.

Both sentences in (1) express the same proposition, but they differ in how they are structured: while (1a) suggests that the interlocutors presuppose information about Aristotle Onassis, (1b) suggests that interlocutors presuppose information about Jacqueline Kennedy. As far as presupposition is concerned, I assume that pragmatic presupposition is defined as:



The set of propositions lexicogrammatically evoked in an utterance which the speaker assumes the hearer already knows or believes or is ready to take for granted at the time of speech. (Lambrecht 1994: p.52)

Second, I am aware that the study of information structure is a landscape that depends on context, not speakers' grammaticality judgements. This is typically implemented by recourse to usage/corpus-based treatments (Michelle and Michaelis 2001; Birner and Ward 1998; Prince 1981). As rightly noted by Lüdeling et al. (2016), information structure should be treated in the context of naturally occurring examples by using authentic utterances, and here where corpora figure prominently. Given the fact that there is no corpus which involves instances of Arabic dislocation as examined in this thesis, I construct examples, along with a context to give the discussion more authenticity. Nonetheless, this does not entail that corpus is not a precious tool to investigate information structure; on the contrary, future work should employ corpora as a supplementary tool to test the claims argued for in this chapter.

In the remainder of this section, I will take up three conceptualizations which are proposed in the literature to play a crucial role in the investigation of topics: aboutness and givenness (Endriss 2009), and referentiality (Lambrecht 1994). I argue that these conceptualizations are not *sufficient* to account for left-dXPs in MSA, and therefore I suggest in section 3.3 an alternative analysis where I propose that the 'Question Under Discussion' framework best characterizes the Arabic data at issue.

### 3.2.1 Aboutness

One possible characterization of left-dXPs in MSA is to assume that dXPs are topics involving an 'aboutness' relation. In the realm of generative theory, Reinhart (1981) presents one of the most cited and adopted definition of topics, the concept of 'aboutness' being the cornerstone, i.e., "the clause is considered to be 'about' the left dXP" (Alexiadou 2006: p.669). To begin with, Reinhart notes that topicality is an elusive concept. She writes:

Although the linguistic role of the relation TOPIC OF is widely acknowledged, there is no accepted definition for it and not even full agreement on the intuitions of what counts as topic." (ibid:4)<sup>1</sup>

---

<sup>1</sup>Endriss (2009: p.18) in turn comments on this quote maintaining that "the situation is no different 25 years later". Unfortunately, this note still applies 38 years later.

In an attempt to reformatize this pragmatic notion, she initially bases her proposal on the notion of “context set” as assumed originally in [Stalnaker \(1978\)](#), which corresponds to “the set of the propositions that we accept to be true”. Put differently in [Endriss \(2009\)](#), the set relates to the shared knowledge of the hearer and the speaker in a given context. This context set is usually updated regularly by adding new propositions into the context according to utterances executed. [Reinhart](#), however, notes that the concept of context set is not organized enough since it does not disambiguate explicitly the topical elements in a simple sentence like ‘*Felix adores Rosa*’. On the basis of the context set as argued by [Stalnaker](#), both DPs (i.e. Felix and Rosa) are understood as topics. To capture this informational parallelism between two DPs in a given sentence, [Reinhart](#) argues that some work needs to be done to fix “the internal organization of the context-set”. To this end, [Reinhart](#) proposes that the organization of discursive information is comparable to a library catalogue; a metaphor corresponding roughly to the file change semantics of [Heim \(1982\)](#). More precisely, each file card corresponds to a proposition. All information in the library is organized and stored under a distinctive address/entry. The topic of the sentence according to this metaphor is the address where the remaining informational parts of the proposition are stored. In other words, the information in an utterance is accessed and identified via the topic entry. Thus, propositions are stored under referential pointers: “NP sentence-topics, then, will be referential entries under which we classify propositions in the context set” ([Reinhart 1981](#): p.80). [Vallduví \(1990, 1992\)](#) proposes a similar approach to model the speaker-hearer discursive knowledge. In particular, what are taken as entries in [Reinhart](#)’s model are ‘addresses’ in [Vallduví](#)’s model: each link (i.e. topic) is a salient address under which the remaining information is stored. To check if a given constituent can be an aboutness topic, some tests have been proposed in the literature such as ‘what about’, ‘as for’ and ‘say something about X’.<sup>2</sup> ([Gundel 1975](#); [Reinhart 1981](#)). The problem with these tests, however, is that they only work for a small subset of cases. According to [Casielles-Suárez \(2004](#): p.24), “ (t)hese tests have been found to be too strong in some instances, since some topicalized phrases fail to pass the tests, and also too weak in other instances, since they can identify as topics too many elements”. As far as Arabic

---

<sup>2</sup>These tests are administered as the following (a) ‘as for’ test: the element can be treated as topic if it can follow ‘as for’. For example, (As for Ali, I love him); (b) ‘what about’ test: the element is topical if the whole sentence can be an answer to the question (what about X) where X can be filled by the topic. (c) ‘say about’ test: the element is licensed as a topic if it can replace X in ‘what about X’.

is concerned, these tests work fine only with dislocated DPs as shown in (2).

- (2) a. THE CONTEXT  
Maḏa ?n Aliyen?  
'What about Ali'
- b. Alyian, lagytuhu fi al-madrasati  
Ali-ACC. met.3SG-him in the school  
'Ali met him in the school'
- c. amma bi ?nisb?ti li alyain, faqad lagytu-hu fi al-madrasati  
As for Ali-GEN, have met him in the school-GEN  
'As for Ali, I met him in the school'
- d. bi alhadeeθi ?aan alyain, faqad lagytu-hu fi al madrasati  
speaking of Ali-GEN, have met.1SG-him in the school-GEN  
'Speaking of Ali, I met him in the school'

If one administers these tests to left-peripheral prepositional phrases (PPs) as in (3), however, the results are totally awkward, near ungrammatical as in (4a,b).

- (3) fi al-madrasat-i gabalt-u alyi-an  
in the-school-GEN met.1SG ali-ACC  
'at the school, I met Ali'
- (4) a. ?amma bi ?nisb?ti li fi al-madrasat-i, gabalt-u alyi-an  
as for/ speaking of in the school, met.1SG ali-ACC  
'I met Ali at the school'
- b. ?fi al-madrasat-i gabalt-u alyi-an  
in the-school-GEN met.1SG ali-ACC  
'at the school, I met Ali'

(an answer to the question: what about the school?)

Crucially, these tests turn out to fail when applying to the indefinite dXPs (5), quantificational dXPs (6) and left-peripheral bare plurals (7), which I shall show shortly are possible candidates to be dXPs in Arabic, with an information-structural import.<sup>3</sup>

- (5) a. qasidatan katabtu-ha  
a poem-ACC wrote-it  
'I wrote a poem'
- b. \*amma bi ?nisb?ti li qasidatan katabtu-ha  
As for a poem-ACC wrote.1SG-it

<sup>3</sup>This is not a quirk of MSA, though. Constant (2014: p.17, fn.8) for example notes that quantificational contrastive (cf. *All politicians are not corrupt ...*) cannot be paraphrased by 'as for'.

'I wrote a poem'

- (6) a. kul al-muwthafeen qabltu-hum  
All the-employees met-them  
'I met all employees last night'
- b. \*amma bi ?nisb?ti li kul al-muwthafeen qabltu-hum  
As for all-NOM employees-ACC met.1SG them  
'I met all employees'
- (7) a. ?tfalun qabltu-hum  
children-NOM met.1SG them  
'I met children'
- b. \*amma bi ?nisb?ti li ?tfalun qabltu-hum  
As for children-NOM met.1SG them  
'I met children'

As it stands, the emerging picture so far points out that the notion 'aboutness' along with its concomitant tests seems to be at odds with the behaviour of left-dXPs in MSA. I conclude, therefore, that 'aboutness' property is not a defining feature of elements occurring in the left periphery in MSA.

### 3.2.2 Familiarity/Givenness

Another possible characterization of dXPs in MSA is to assume that these elements must be topics involving discourse oldness. This typically relates to the assumption that topics must refer to old entities in the discourse (Iatridou 1995; Rizzi 1997). This condition on topics has been taken seriously by Erteschik-Shir (1997) who argues that topics must denote old information and be related to earlier propositions in the discourse. "Oldness" as a defining feature of topics, however, has been disputed by many authors for empirical reasons (Reinhart 1981; Lambrecht 1994). In particular, being topic does not necessarily entail oldness, as it has been noted that topics can be discourse new elements. Consider the example in (8)

- (8) That was a student of mine. Her HUSBAND had a HEART attack.  
(Lambrecht 1994: 326)

To explicate the informational import of the two sentences in (8), Lambrecht writes:

The purpose of the utterance in [8] was to explain why the speaker had left a discussion among colleagues in order to talk to the stu-

dent in question. In the given situation, the proposition expressed in the second sentence in [8] was not to be construed as conveying information about the subject referent since this referent was not topical at the time of utterance. What was topical was the student, expressed in the possessive determiner *her*. But the same sentence, in a different utterance context, could be used to convey information about the husband (What about her family? - Her HUSBAND recently had a HEART attack but her KIDS are doing FINE). In this case, the first of the two accents would be a topic accent, serving to establish the referent as the topic with respect to which the proposition is to be interpreted as relevant information.

In other words, the second sentence tells something about somebody who utters a proposition about a '*a family member of the student*' whose referent is already evoked in the discourse. The interlocutors in this conversational setting are presupposed to share the same mental states pertaining to the referent (i.e. *student*). For some communicative reasons, new topics pertaining to the old topic (i.e. *student*) are introduced into the discourse, which are usually marked prosodically via fall rise tone, or B-accent in the sense of Jackendoff (1972). Hence, the correlation topic-old information is not tenable. Reinhart (1981) further rightfully argues against topic-old correlation as in (9)

- (9)    a.    Who did Felix praise?  
           b.    He praised HIMSELF.

In this context, the subject pronoun (*he*) is taken to be a topic by virtue of being predictable and already evoked in the previous discourse. The reflexive element (*himself*) is in an argument focus position which is represented in an open proposition as 'He praised X'. Interestingly, the two elements denote the same referent, which is new and old at the same time. Therefore, attributing a decisive 'oldness' property to the topic runs into the problem accounting for such examples; see Von Stechow (1981: p.86) for a similar observation,

All in all, then, I align myself with Reinhart (1981) that the notions of old and new information are problematic, especially when these notions are understood to be property of referents; see also Von Stechow for a view that this awkward conclusion can receive an alternative analysis; an issue which I will not pursue here any further.

### 3.2.3 Referentiality

Another possible treatment of dXPs occurring in the left periphery in MSA is to assume that these elements are topics which relate to discourse referents. That is, left dXPs have to be referring entities in the world of discourse. [Lambrecht \(1994: p.335\)](#) explicitly elucidates the referential facet of topics as follows:

The topic relation is the relation of aboutness between a proposition and a discourse entity. A proposition is interpreted as being about an entity if it is understood as conveying relevant information with respect to this entity, i.e. as increasing the hearer's knowledge of it. A topic entity must exist in the universe of discourse independently of what is being predicated of it in each proposition, i.e. it must be a discourse referent.

According to this quote, referentiality is understood as a condition on licit topics. Additionally, this restriction, by logical necessity, bans non-referring expressions such as indefinites and quantified NPs from appearing in topic positions. As a first approximation, this position is not without shortcomings. First, in Arabic, one can easily construct examples of dislocated quantifiers and indefinites which are widely assumed as not referential entities (but see below for a due qualification). This is evidenced in (10a), which is taken as a response to 'what did you write?', and (10b) as a response to 'whom did you meet?'.  
(10)

- a. risalat-an        katabtu-ha  
   IND-letter-ACC wrote-it  
   'a letter, I wrote it'
- b. kul al-muwthafeen qabltu-hum lilat-a        amsi-n  
   All the-employees met-them    night-ACC yesterday-GEN  
   'all employees, I met them last night'

Second, there exists empirical evidence from other languages as well which militates against the proposedly referential nature of topics. Precisely, the fact that any phrasal category in Spanish, as illustrated in (11) can be topicalized.

- (11) a. Listo no lo parece  
      clever not CL seems
  - b. Que fumas        lo sabemos todos  
          that smoke-2SG cl know-1PL all
  - c. De la conferencia no he        oído nada  
          of the lecture        not have-1SG heard nothing
- ([Casielles-Suárez 2004: p.27](#))

According to [Casielles-Suárez](#), these data would be totally mysterious if one treats referentiality as a *defining* property of topic expressions. This can be attributed in part to the assumption that the function of referentiality (i.e. referring expressions) has been conceived to “identify an individual, i.e. to denote e-type semantic object” ([Gecség and Kiefer 2009](#): p.595). Third, [McNally \(1998\)](#) maintains that association between topics and referentiality does not hold in languages such as English; in particular, B-accent, in the sense of ([Jackendoff 1972](#)), which is taken as a phonological operation to mark topics via a fall-rise tone, can be extended to be involved in non-referential elements like determiners and negative quantifiers; but see [Eilam \(2011](#): p.15-16) for an evaluation of [McNally](#)’s claims.

Nonetheless, there are good reasons to keep referentiality as *a* condition on topics. In particular, it is well known that there are some languages employing morphological particles to denote topicality. What is relevant is that non-referring expressions in these languages are not compatible with morphological topic marking.

- (12) a. žek’u-za-r šebín r-āq’-inči  
man-PL-DAT nothing IV-be-FUT.NEG  
‘People will get nothing’  
b. \*žek’u-za-r šebín-gon/šebín-no r-āq’-inči  
man-PL-DAT nothing.IV-**gon/nothing.IV-no** IV-be-FUT.NEG  
‘Nothing, people will get’ ([Polinsky and Potsdam 2001](#): 594-595)

According to [Polinsky and Potsdam \(2001\)](#), Tsez has two morphological particles to denote topichood; *no* and *-gon*, which can correspond to their English equivalents ‘as for’ or ‘talking about’. In the examples (12b), the two particles are not compatible with QPs, which are one type of non-referring expressions.

Along the same lines, Japanese (13a) and Korean (13b) have particles to encode topichood-related elements: *wa* and *n-(un)*: these discourse particles cannot cooccur with non-referential elements such as QPs.

- (13) a. \*daremo-wa  
anyone-top  
b. \*amuto-nun  
anyone-top

([Tomioka 2007](#): p.1576)

On the basis of empirical evidence like this, it has been contended that referentiality must be understood as a licensing condition on topics.

In this thesis, I cut the knot and assume that referentiality is *a* condition



on topics, but it is not a sufficient one as far as the left periphery in MSA is concerned: it is secondary to another encompassing information-structural notion *viz.*, contrast. More specifically, what underlies a referential interpretation of left-dXPs in MSA is whether a dXP is drawn from a contrast set. As I will show in section 3.4, this position will account for the violation of referentiality for cases of the sort depicted in (5-6).

### 3.3 CLLD I and CLRD I in MSA : the proposal

So far, I reviewed a number of different ways to define topics. What the foregoing discussion shows is that the definitions that rely on old information, aboutness etc. do not pick out left dXPs in Arabic. If these definitions are taken for granted, this might suggest that left dXPs in Arabic are not topics, contrary to fact. In what follows, I maintain that there is an alternative way of defining topics appearing in the Arabic left periphery, which is rooted in ‘Question Under Discussion’.

#### 3.3.1 Question Under Discussion (QUD)

In this subsection, I would like to spell out my proposal with respect to the interpretation of dXPs partaking in the right and left peripheries of the Arabic clause structure. Building on Ott (2017), I assume that the interpretation of dXPs in Arabic can be drawn from “question-driven discourse models”, i.e.; the idea that discourse is principally shaped in the form of a question and an answer (Carlson 1982; Roberts 2012). The central concept in these models is that of Question Under Discussion, QUD for short. For a nice overview of this approach, the reader is referred Portner and Yabushita (1998); Constant (2014); see also Beaver et al. (2017) for a historico-contemporary perspective. Put otherwise, under this framework,

discourse is analyzed in terms of the strategy of inquiry perused by the interlocutors, and individual utterances are interpreted relative to the question being addressed. (Beaver et al. 2017: p.265)<sup>4</sup>

---

<sup>4</sup>Inspired by Stalnaker (1978), Roberts (2012: p.4) assumes that “the primary goal of discourse is communal inquiry — the attempt to discover and share with the other interlocutors “the way things are”, i.e., to share information about the world.” Moreover, Roberts likens the discourse to a game which typically has goals, players and strategies. Most important, these conversational strategies, as in a game, are different: “some strategies may be better, some worse; this is a matter of the rationality of the participants and not of [linguistic competence] *per se*” (brackets mine).



QUDs can be expressed either explicitly or implicitly. Central to this approach are information-structural notions such as contrastive topic and focus, which play an essential role in disambiguating the implicit QUDs. In particular, focal expressions are intended to indicate that the speaker is addressing a current QUD, by invoking a set of alternatives (i.e. answers) corresponding to a QUD. On the other hand, the exclusive presence of contrastive topics in the left periphery points to the assumption that there are “relevant questions the speaker is not currently addressing” (Ott 2017). In other words, the speaker in this situation tackles a sub-question of the QUD (Büring 2003). To be concrete, let us take the example in (14) from Krifka (2011), cited in Ott (2017).

- (14) [F I visited my PARENTS last week.] [CT My FATHER] is [F FINE] , but  
[CT my MOTHER] is [F in a HOSPITAL]

Crucially, information-structural features can be understood by resorting to implicit QUDs, drawing from Ott (2017).

- (15) a. What’s new?  
b. [F I visited my PARENTS last week.]
- (16) a. How are they?  
b. How is your father?  
c. [CT My FATHER] is [F FINE]
- (17) a. How is your mother?  
b. ...but [CT my MOTHER] is [F in a HOSPITAL]

The first answer (15b) is athetic, an all-focus sentence which can be taken as an answer to the question in (15a). In (16), the speaker has a contrast set in his/her mind, thereby marking the topic ‘*father*’ as a contrastive expression to point out that the speaker is tackling the sub-question depicted in (16b). The contrastive marking of ‘*father*’ in turn indicates that there are alternatives to be highlighted giving rise to the sub-question in (17a) which is resolved in (17b). Note here that the topic ‘*mother*’ is marked as a contrastive element in parallel to (16c) due to the fact the two topics are responses to implicit subquestions. Hence, the locus of contrastive topicality lies in how QUDs are formed: contrastive topics, which are typical of left dislocation, correspond to sub-questions. I will show in section 6.4.4.2 that QUD will have a non-trivial impact in explaining why CLRD I in MSA is selectively opaque to islands, contrary to CLLD I which is transparent to islands.

By employing these analytic tools, I will discuss in what follows how this discursive mechanism (i.e. QUD) can derive the interpretive properties of dXPs in Arabic dislocation. In a nutshell, Arabic dislocation is taken to be as an answer to a QUD: while the answer is a contrastive topic in a CLLD I articulation, the answer must be a contrastive focus in a CLRD articulation

### 3.3.2 Contrastive topics

Before touching upon the interpretive properties of left dXPs in MSA, a short excursion into the concept of ‘contrastive’ is in order. According to the Chambers Dictionary (1998), contrast is defined as “opposition or unlikeness of things compared”. It is also described as “juxtaposition or comparison showing striking differences” (Repp 2010). On the basis of these two definitions, contrast, linguistically speaking, is understood to refer to contrasted elements which show some degree of differences and oppositions. Abstracting away from details<sup>5</sup>, I will be specifically concerned with a salient kind of contrastiveness, *viz.* contrastive topics. According to Krifka and Musan (2012: p.30), contrastive topics as in (18) are characterized by a “rising accent”. They maintain, however, that they are not taken as a distinct information-structural notion on their own but they are a combination of broader IS notions, *viz.* topic and focus; but see Molnár (2002) for a proposal that contrast is an autonomous information-structural notion.

- (18) a. What do your siblings do?  
 b. [<sub>F</sub> My sister ]<sub>TOPIC</sub> [<sub>F</sub> studies MEDicine] and [<sub>F</sub> my BROther ]<sub>TOPIC</sub> is [<sub>F</sub> working on a FREIGHT ship].

In this question-answer congruence, ‘sister’ in B’s response is focused to highlight that there is an alternative topic, *viz.* ‘brother’, which needs to be accommodated. This conversational move is triggered to indicate that the speaker is deviating from the main question to bring into light some information which is not expected to be addressed if the question A is taken literally. In other words, the two answers in B are triggered by implicit sub-questions to highlight alternative topics. As noted earlier, this how contrastive topics are realized in the first place.

One important qualm I have with Krifka and Musan (2012) is that contrastive topics are not akin to focal elements, although one cannot miss the fact

---

<sup>5</sup>For an extensive discussion of this concept and its complexities, the reader is referred to Repp (2010).

that the two notions could behave prosodically in a similar fashion. In particular, I assume that the two notions differ on how to manage the Common Ground, CG for short. The original formulation of CG ([Stalnaker 1978](#)) is employed to “model the information that is mutually known to be shared and that is continuously modified in communication” ([Krifka 2008](#): p.245). What I would like to suggest is that focus and (contrastive) topics behave differently with respect to CG. That is to say, while contrastive topics trigger a set of propositions which are necessarily known to the hearer, focal expressions are not parallel in this respect, i.e., the function of contrastive topics is to highlight an already topic-marked element in CG in contrast to focus expressions whose function are to add unpredicted/novel elements to the CG (but see below for a due clarification with respect to right dislocation).

As an illustration, let us re-interpret the sentence in (18b). The B’s answers are meant merely to highlight that there is some information which known to the questioner. More specifically, the questioner surely knows that the addressee has a sister and a brother, which is evident in the question-formation (i.e. siblings). Here, it is unlikely to claim that there is a real addition to the CG as the interlocutors share the same knowledge repertoire. On the contrary, this knowledge repertoire has been modified with respect to information in the domain of the comment by adding new information (i.e. medicine and freight ship) which are not apparently shared among the interlocutors at the time of the utterance. Therefore, there is no plausible justification to associate contrastive topic with focus since this will blur the picture with respect to the interpretive discrepancy among dXPs in the left and right peripheries as I shall argue shortly.

To sum up, contrastive topics are characterized by invoking a set of alternatives which must be shared by the interlocutors. These alternatives are essentially raised to accommodate sub-questions (usually implicitly) whose function is to draw the addressee’s attention to unexpected information which is crucial to the discourse.

### 3.3.2.1 CLLD I in MSA

Having discussed contrastive topics<sup>6</sup>, let us now turn to the question: how are the left dislocated elements interpreted in MSA? Building on [Villalba \(2000\)](#);

---

<sup>6</sup>Admittedly, this is an overly simplified exposition of this recalcitrant notion, but it is enough for current purposes. For more and (indeed) extensive discussion, see [Büring \(2003\)](#); [Gyuris \(2009\)](#); [Constant \(2014\)](#) a.o.

López (2016); Ott (2017), elements appearing in the Arabic left dislocation are contrastive topics. As noted earlier, this means that the speaker in the context of left-dislocation construction sidetracks the major QUD and prefers instead to address a sub-question. To appreciate this point, consider the following examples involving two left dislocation constructions as depicted in (19b,c).

- (19) a. THE CONTEXT: Where are your brothers?  
 b. ali-an, raʔta-hu fi al-soog-i  
 Ali-ACC saw.3SG him-ACC in the-market-GEN  
 'I saw Ali at the market'  
 c. wa muhammd-an, rʔytu-hu fi al-masʒid-i  
 and Muhammed-ACC saw.1SG in the-mosque-GEN  
 'I saw Muhammad in the mosque'

The speaker here responds to the general QUD. But, instead of answering the question directly, the speaker answers with the fragment '*Alian*', which is not a felicitous answer to the to Q1 whose domain is the set of answers giving information on the location of one's brothers. The production of clausal fragment '*Alian*' is not meant to be arbitrary but to serve the goal of accommodating a sub-question as sketched in (21b,22b).

- (20) Q1. Where are your brothers? = the main QUD
- (21) a. A1: [~~I saw Ali at the market~~]  
 b. Q2: Where is Ali? = sub-question of Q1  
 c. A2: [I saw him at the market]
- (22) a. A2: [~~I saw Muhammed in the mosque~~]  
 b. Q3: Where is Muhammed? = sub-question of Q1  
 c. A3: [I saw him in the mosque]

As can be shown, two alternatives have been highlighted, which means that the speaker deviates from the main QUD (i.e. where are your brothers) in order to create suitable mechanisms for drawing attention to salient alternatives. Notice here that the left-peripheral elements (*Ali* and *Muhammed*) are first uttered as clausal fragments which are not connected to a given clause at all. The question then is: how are they connected? The answer is by triggering an accommodation mechanism via a subquestion whose answer must contain a co-referential element to these elements. In the answers to the subquestions in (21b) and (22b), the clause does not contain the peripheral elements since these elements have been already uttered as short answers in (21a) and (22a). Thus,

left-dislocation in MSA operates as follows:

- a. The dXP is realized as a short answer (i.e. elliptical fragment).<sup>7</sup>
- b. Because the short answer creates a conversational insecurity on the part of hearer, the speaker responds to an implicit question (i.e. sub-question) where she/ he utters a distinct clause containing the pronominal which refers to the left-peripheral element.

As far as invoking alternatives are concerned, the postulation of contrastive topics in the Arabic left periphery presupposes that there is an “ordered set of alternatives” (Repp 2010: p.1334), which do not need to be spelt out entirely. Instead, I propose that there is somehow a ranking strategy regulating the spell out of alternatives in a given conversational setting. For example, the speaker could utter the two alternatives as in (21,22) in conformity with a certain context. In other contexts, however, (s)he prefers instead to single out one alternative, as is the case in most of the dislocation cases. These conversational choices depend basically on many notions such as relevance and expectation among possible others (ibid:1334). Note, crucially, that the lack of contrastiveness gives rise to infelicity. As shown in (23), the dXP *ali-an* is infelicitous because it is employed as a non-contrastive topic, which is not implicitly or explicitly contrasted with other alternatives in the discourse.

- (23)
- a. THE CONTEXT: tell me something about your cousin Ali.
  - b. #ali-an qabaltu-hu  
Ali-ACC meet.1SG-him  
'I meet Ali.'

The observations examined so far suggest the following conclusion:

- (24) *The Interpretation of CLLD I in MSA*  
Left dislocation of XP in MSA is felicitous iff XP is interpreted as a contrastive topic.

### 3.3.3 Focus constructions

Focus is typically equated with new information, which is not shared between the speaker and the hearer (Chomsky 1971a; Jackendoff 1972; Zubizarreta 1998).

---

<sup>7</sup>One may rightly note that this is different from what the mainstream literature understands by ‘fragment answers’ (Merchant 2001); the usual assumption is that the fragment answer is a focus, and this is at odds with the interpretive content of dXPs in the left periphery. This is apparent, however, in a sense to be explicated in some detail in section 6.2.

In other words, a set of propositions in the Common Ground ([Stalnaker 1978](#)) need to be updated for a given context. In Lambrecht's ([1994: p.213](#)) parlance, foci can be taken as "(t)he semantic component of a pragmatically structured proposition whereby the *assertion* differs from the presupposition" (italics mine). As far as the prosody is concerned, foci is marked by heavy stress, which is called A-accent, or 'Answer Accent', in contrast to topics, which are marked by B-accent, or 'background accent' ([Jackendoff 1972](#)). For concreteness, consider the following examples, where capital letters are used to highlight focus. While *Peter* bears the foci accent in (25a), it is *a house*, which carries the foci accent in (25b).

- (25) a. PETER sold a house
- b. Peter sold A HOUSE.

Although these two sentences have the same meaning, their felicity is context-dependent, however. In particular, while the sentence (25a) can be an answer to the question *who sold a house?*, (25b) the sentence can be only felicitous as an answer to the question *what did Peter sell?* This connects to a widely-held assumption in the literature that foci are thought to invoke a set of alternative propositions. A prominent view of this ilk is argued for by Rooth's ([1992](#)) Alternative Semantics, according to which foci mark the existence of alternatives which are relevant for the interpretation of a given question. For instance, Peter in (25b) has a set of alternatives which he can sell, [a car, an apartment, a house etc.]. In this sentence, the 'selected' element is 'a house' and hence it carries A-accent typical of focal elements.

[Lambrecht \(1994: p.221f\)](#) adopts a tripartite characterization of focus constructions. These include: (i) predicate-focus structure (26), (ii) argument-focus construction (27) and (iii) sentence-focus structure (28).

- (26) a. What happened to your car?
- b. My car/It broke DOWN.
- (27) a. I heard your motorcycle broke down?
- b. My CAR broke down.
- (28) a. What happened?
- b. My CAR broke down.

In predicate-focus construction as in (26), the predicate is focalized while the subject is presupposed. In argument-focus structure as depicted in (27), the

focus accent is placed exclusively on an argument, with a corrective denotation. The third type in (28) concerns sentence-focus,<sup>8</sup> and is limited to complete propositions which can be uttered as answers to the typical out-of-the-blue question *what happened?*<sup>9</sup>

Having discussed focus briefly, I move now to a crucial distinction relevant to the current thesis *viz.*; information focus vs. contrastive focus

### 3.3.3.1 Information Focus vs. Contrastive Focus

Kiss (1998) makes a distinction between two broad notions: identificational focus (which is also called contrastive focus), and information focus. According to Kiss (1998: p.245), contrastive focus are those elements which:

represent(s) a subset of the set of contextually or situationally given elements for which the predicate phrase can potentially hold; it is identified as the exhaustive subset of this set for which the predicate phrase actually holds.

This type of focus is distinguished from information focus, which is employed to denote purely new and nonpresupposed information. According to Kiss, information focus is necessary in every sentence, contrary to identificational focus, which is not present in every sentence. Importantly, although contrastive topics share some features with [contrastive] focus *viz.*, the presence of alternative set (Sturgeon 2008), they differ in one crucial aspect in that contrastive focus, unlike contrastive topics, is regulated by an exhaustive mechanism. More on this below.

Typically, information focus can be verified by recourse to a question/answer congruence as illustrated earlier. As far as contrastive focus is concerned, the archetypical cases are those involving 'correction' as illustrated in (29b); I use CF to highlight contrastive focus throughout.

- (29)    a.    Ali sold a house  
          b.    Ali sold [<sub>CF</sub> a car], not a house.

---

<sup>8</sup>Incidentally, this configuration is labelled differently in the literature: "news sentences" (Schmerling 1976); "presentative constructions" (Bolinger 1989); "event-reporting sentences" (Lambrecht 1988); "all-focus sentence" Vallduví (1990). See El Zarka (2013: p.25).

<sup>9</sup>It is worth noting that (Erteschik-Shir 1997, 2007) assumes that there is a 'stage topic' the role of which is to identify and specify the place and the time of an utterance. According to her, this implicit element does not need to be expressed syntactically. If this argument is on the right track, then the possibility of 'topicless' sentence is non-existent contra the previous treatments cited in (fn.10), which entertain the possibility that topics can be absent.



According to Lambrecht's (1994) line of reasoning, the sentence in (29) involves two parts: the pragmatic presupposition represented by the open proposition [Ali sold X], and the pragmatic assertion [x]. In (29a), the speaker seems to utter unpredictable information (i.e. a house) which stands in a contrastive relation with other elements (i.e. a car). At this point, the hearer responds using the sentence depicted in (29b) via a corrective tone, asserting that the sentence in (29a) is false.

Crucially, the most relevant function of contrastive focus, which will have a great impact on the interpretation of CLRD I in MSA as I argue in due course, is exhaustiveness. This notion is typically employed as an exclusion mechanism, that is, it indicates that "the focus denotation is the only one that leads to a true proposition, or rather more generally: that the focus denotation is the logically strongest that does so" (Krifka 2008: p.259). To be concrete, consider the following example:

(30) it's [<sub>CF</sub> JOHN and BILL] that stole a cookie. (Krifka 2008: p.259)

According to the example shown in (30), it is *only* John and Bill who stole a cookie, not somebody else. In a sense, this property of contrastive (identificational) focus is triggered by a mechanism dubbed 'exhaustive identification', a notion attributed to Kenesei (1986), whose function is to constrain a set of properties which are present in the discourse (Kiss 1998). More on this below.

### 3.3.3.2 CLRD I in MSA: Contrastive Focus

Having touched upon the interpretation of the left-dXPs in MSA, I turn now to the interpretation of right-dislocated elements. Following Ott (2017), I propose that Arabic CLRD is instantiated to "address an implicit QUD" raised by the pronominal in the host clause. At a first approximation, however, I do not follow Ott's position that CLRD can be interpreted as given elements for the simple reason that right-dXP in MSA is employed to disambiguate and specify the referent of the pronominal clitic. To appreciate this position, let us take this example:

(31) hayʔtu-hu                      albariḥa-ta, khalid-an  
       greet.1SG-him.ACC last night,    khalid-ACC  
       'I greeted Khalid last night'

All cases of right-dislocation in Arabic can be understood by postulating that the pronominal in the host clause such as 'hu' in (31) raises an implicit question



which must be addressed. In other words, the presence of cataphoric elements as in (31), characteristic of clitic right dislocation, creates a gap in the hearer's Common Ground which in turn triggers an implicit QUD as in (32).

- (32) a. hayʔtu-hu                      albariha-ta  
           greet.1SG-him-ACC last night  
           'I greeted him'
- b. man hayʔta?  
           who greet.2SG?  
           'Who did you greet?'
- (i) Khalid-an  
               'Khalid-ACC  
               'Khalid'

The answer to this QUD is a short answer stripped out of an elliptical clause, which cannot be a given element known to the addressee. Rather, it is new information which is unheard of on the part of the hearer. This can be supported by the fact that the focal element 'Khalid' is an answer to a *wh*-configuration, a characteristic of focus constructions (Rochemont 1986). There is, however, one glitch which *completely* undermines this conclusion, i.e., the fact that there are two offending cases which cannot be right-dislocated: indefinites and quantificational phrases exemplified in (33)<sup>10</sup>.

<sup>10</sup>Interestingly, this observation is not a quirk of MSA. Anagnostopoulou (1999a: p.792 fn.9) for instance notes that right dislocation of indefinites is impossible in Modern Greek "when an XP undergoes 'Focus Preposing' ". No such effects, however, are attested for definites (b).

- a. \*O JANNIS to pini    ena ouzaki  
       the John<sub>F</sub>    it drinks an    ouzo  
       'It is John that would drink-it an ouzo'
- b. O JANNIS to pini    to ouzaki  
       the John    it drinks the ouzo  
       'It is John that would drink-it the ouzo'

Likewise, Cadiot (1992: p.66) cites an example from French showing that indefinites (a) cannot be right-dislocated, the reason being that they do not imply "independently guaranteed givenness". As far as quantifier phrases are concerned, Cruschina (2010: p.61) observes that "quantified indirect [and direct] objects (b) cannot be right-dislocated and resumed by a clitic".

- a. \*Je la    connais, une fille  
       I know her    a    girl'
- b. Non (\*gli)    ha parlato Gianni, a    nessuno  
       not to-him has talked John    to nobody  
       'No, John didn't speak to anybody'

I leave this matter to future research to examine whether there is a valid generalization underlying atypical topics, which *pretheoretically* seem to resist right-dislocation from a cross-linguistic perspective.

- (33) a. \*qabltu-hum lilat-a albarih-ti kul al-muwḏafeen  
 met-them night-ACC yesterday-GEN all the- employees  
 "I met all employees last night"
- b. \*katabtu-ha risalat-an  
 wrote-it IND-letter-ACC  
 "I wrote a letter"

As can be seen, these cases cannot partake in Arabic right-dislocation. The question is: why is this the case? Is it due to semantico-syntactic reasons, or something else? I argue that it is because CLRD I in MSA is a strategy to mark identificational focus, not information focus. To show that this is the case, an excursion into the composition of identificational focus is in order. As originally proposed by Kiss (1998: p.248), identificational focus involves "perform(ing) exhaustive identification on a set of entities given in the context or situation", contrary to information focus, whose role is to "mark the nonpre-supposed nature of the information it carries". What is relevant to the current discussion is that there are distributional restrictions on identificational focus. To begin with, Kiss (1998: p.251) maintains that certain types of phrases in Hungarian cannot constitute identificational focus, including universal quantifiers (34a), 'also'-phrases (34b), 'even'-phrases (34c), and the existential quantifiers 'somebody/something' (34d). Similarly, the same types of phrase cannot occur in the focus position in cleft-sentences, the archetype of identificational focus in English, as indicated by the translation.

- (34) a. \*Mari minden kalapot nézett ki magának.  
 Mary every hat.ACC picked out herself.DAT  
 \*'It was every hat that Mary picked for herself.'
- b. \*Mari egy kalapot is nézett ki magának.  
 Mary a hat.ACC also picked out herself.DAT  
 ?'It was also a hat that Mary picked for herself.'
- c. \*Mari még egy kalapot is nézett ki magának.  
 Mary even a hat.ACC also picked out herself.DAT  
 \*'It was even a hat that Mary picked for herself.'
- d. \*Mari valamit nézett ki magának.  
 Mary something.ACC picked out herself.DAT  
 \*'It was something that Mary picked for herself.'

Interestingly, Moutaouakil (1989: p.22) further notices analogous constraints in Arabic; i.e., contrastive focus cannot be realized in a pseudo-cleft sentence (35) as well as negative-restrictive sentences (36). I cite his examples below with a slightly modified notation.

- (35) \*allaḏi ʔakaltu θaridun  
the-one ate-1SG tharid-NOM  
‘What I ate was tharid’ [‘tharid’ is a traditional dish]
- (36) a. \*ma ʔakaltu ʔilla θaridun  
not ate-1SG but tharid-NOM  
‘I only ate tharid.’
- b. \*ma ʔutu min s-safari ʔilla al-barihata  
not returned-1SG from the-journey.GEN but yesterday.ACC  
‘I returned from my journey only yesterday’

What I would like to suggest is that indefinites and quantifier phrases of the sort depicted in (35a,b), in addition to the examples cited in [Moutaouakil \(1989\)](#)<sup>11</sup>, induce a grammaticality violation for the simple reason that CLRD I in MSA is a strategy to mark identificational (contrastive) focus.<sup>12</sup> Since identificational focus involves ‘exhaustive identification’, these configurations are not possible candidates to be fit in the domain of identificational focus. A possible explanation for this, following [Szabolcsi \(1994\)](#) and [Kenesei \(1986\)](#) cited in [Kiss \(1998\)](#), is that these configurations denote “group-denoting quantifiers”, which are not characterized by “exclusion by identification”. For instance, the quantifier *kul al-muwḏafeen* ‘all employees’ in (35a), and the indefinite *risalat-an* ‘a letter’ in (35b) do not involve a subset of a set whose members are presupposed. In other words, these elements operate without exclusion, in that they identify a member of the relevant set of persons and objects “for whom the predicate holds without excluding any members” ([Kiss 1998](#): p.252). To strengthen my argument that it is identificational focus what underlies CLRD I in MSA, consider again the example in (35). In particular, since identificational focus involves exhaustivity (i.e. it identifies a subset), it follows then that the predicate in (35) never holds of others. If the predicate happens to hold of others as in (37) (i.e. there are also other true answers to the question), a right dislocation construction in MSA is infelicitous.

- (37) a. ʔhayʔtu-hu albariha-ta  
greet.1SG-him-ACC last night

<sup>11</sup>It is worth highlighting that [Moutaouakil \(1989](#): p.3), following the traditions of Functional Grammar (FG), does not account for why the sentences in (38,39) are ungrammatical. This is, essentially, in consonance with the methodological principles of FG, which holds that (i) language is an instrument of communication, (ii) [t]he purpose of linguistics is the description of the speaker’s ‘communicative competence, and (iii) Linguistic description should achieve pragmatic, psychological and typological adequacy.

<sup>12</sup>Importantly, I do not follow [Kiss \(1998\)](#) who assumes the involvement of a functional head (i.e. FocP) in consonance with the cartography approach to discourse notions. See section 4.5 for a critical evaluation of the cartography program.

- 'I greetd him'
- b. man hayʕta?  
 who greet.1SG?  
 'Who did you greet?'
- (i) #Khalid. Ali. Nassir etc.

Note that contrastive focus as defined earlier must be 'given': contrastively focalized elements must be previously introduced in the discourse. Here we got a paradox given the assumption attributed to [Rochemont \(1986\)](#) that contrastive focus is a type of focus. As it stands, this means that contrastive focus should not be deaccentuated. Though this is at odds with the prosodic properties of right dislocation, which typically involves prosodic deaccentuation ([Feldhausen 2010](#)). The inescapable explanation to go about this is to propose, following ([Horvath 2000](#)) cited in [Fominyam and Šimík \(2017\)](#), that when an element is interpreted exhaustively, it need not be focus at all. Thus, the focal status of right-dXP in Arabic is not equal to new information, since the speaker right-dislocates an element to exclusively single out one entity or a subset of entities among many alternatives which are essentially known to the hearer as sketched in (38).

- (38) a. ʃahatu sayyrata-hu  
 saw.1SG car-his.ACC  
 'I saw his car'
- b. Whose car did you see?  
 (I saw Ali's car),(I saw Khalid's car) etc.

In other words, the speaker evaluates many shared presuppositions in a given conversational setting, and elects one element to be right-dislocated. The exclusive choice of either 'Ali's car' or 'Khalid's car' as in (40b) for instance is preceded by "evaluative presupposition", in the sense of [Kiss \(1998\)](#), on the part of the speaker when faced by the implicit QUD in (40b).

The observations examined so far uncover the following conclusion:

- (39) *The Interpretation of CLRD I in MSA*  
 Right dislocation of XP in MSA is felicitous iff XP is interpreted as a contrastive focus.

### 3.4 Atypical topics in the left periphery: necessary detour

In this section, I will be concerned with what I call ‘atypical topics’<sup>13</sup> i.e., those elements which at first sight seem to be recalcitrant in a topic position in the left periphery, such as indefinites and quantifiers (i.e. they are not predicted to occur in a topic position). The oft-cited logic behind this ban is that these topics do not “identify an accessible referent” (Leonetti 2013: p.107). As far as indefinites are concerned, a great deal of careful attention has been paid to this configuration in the literature (Gundel 1975; Larsson 1979; Rizzi 1986; Ward and Prince 1991), cited in De Cat (2007), together with various clashing claims as to the ability of indefinites to be interpreted as full-fledged topics in the interpretive and pragmatic sense. Some claim that only indefinites have to be specific in order to be felicitous topics (Gundel 1975). Some, however, argue that indefinites (i.e. whether it is specific or not) are never topics (Larsson 1979). Others take a more radical view and maintain that all quantificational elements can never occur in a topic position (Zribi-Hertz 1994). As for quantifiers, Reinhart (1981) notes that quantified DPs can be topicalized if they “can be interpreted (pragmatically) as denoting sets”.

A thread running through the literature argues that CLLD I-ing an typical topics is possible, with an emphasis on the efficient role of clitics at the interpretive level in a CLLD-I articulation (i.e. the presence of clitics imposes a specific interpretation of an atypical topic). The question is how binding between an atypical topic and a pronominal is possible? In other words is there an explicit characterization of how quantifiers and indefinites can be related to pronominal clitics in a CLLD I articulation? In what follows, I discuss in section 3.4.1 how other languages license atypical topics related to clitics. In a nutshell, these languages put a tremendous emphasis on the interpretative import of clitics in licensing atypical topics. I argue against this line of reasoning in section 3.4.2, where I show that it is the interpretive import of dXPs, which is rooted in contrastiveness, what gives rise to a felicitous interpretation of atypical topics in MSA.

---

<sup>13</sup>This label has been suggested to me by Peter Ackema (p.c.).

### 3.4.1 How other languages license atypical topics

The main aim of this subsection is to investigate how other languages license the presence of atypical topics which are linked to clitics. As will be shown in this subsection, doubling constructions require the doubled elements be interpreted as specific, or given “a fixed reference” to quote [De Cat \(2007\)](#). Interestingly, this seems to be a robust generalization from a cross-linguistic perspective.<sup>14</sup>

For reasons of space, I will confine myself to three languages: Romanian, Italian and Greek.

---

<sup>14</sup>See [Bleam \(1999\)](#); [Suñer \(1988\)](#) a.o. on Spanish; [Kallulli \(2000\)](#) a.o. on Albanian; [Dimitrova-Vulchanova and Hellan \(1999\)](#) a.o. on Bulgarian. For an exhaustive list, see [Leonetti \(2007, 2008, 2013\)](#). Note, incidentally, that I’m glossing over a well-structured analysis put forth by [Gutiérrez-Rexach \(2000, 2001, 2002\)](#). In particular, he proposes four constraints which are argued to be operative in Spanish doubling: (i) the Principle Filter Constraint, (ii) the Animacy Constraint, (iii) the Presuppositionality Constraint and (iv) the Context Dependence Constraint. The first constraint proves to be crucial in licensing doubled quantified NPs. For concreteness, consider the examples in (b) and (c), taken from [Gutiérrez-Rexach \(2001: p.126\)](#), (a) being the control sentence.

- a. Una convención demócrata se está celebrando en la ciudad.  
a convention democrat SE is celebrating in the city.
- b. Acabo de ver a tres de los congresistas/ tres congresistas en una limusina  
Finished-I of see to three of the congressmen/ three congressmen in a limo
- c. Los acabo de ver a tres de los congresistas/ tres congresistas en una  
Them finished-I of see to three of the congressmen/ three congressmen in a  
limusina  
limo

According to [Gutiérrez-Rexach](#), the Spanish sentences shown in (b) and (c) are semantically different: the presence of the clitic in (c) imposes a definite interpretation on the associated existential quantifier, suggesting that “[t]he speaker is referring to a unique group of individuals”. The crucial observation is that there is a feature selection by the clitic, whereby the clitic co-occurs with an element specified for the feature [+definite]. The condition underlying the definite force of clitics is rooted in the ‘Principle Filter Constraint’, which is taken as a condition imposed on the well-formedness of doubling. In [Gutiérrez-Rexach](#)’s words:

... from a semantic point of view the presence of a doubling accusative clitic forces the associated existential quantifier to be a principal filter, in other words, to behave like a definite in that context. (2001: p.127).

In section 3.4.2, I will show that this approach, sophisticated though, cannot be applied to MSA. For one thing, this is attributed to my assumption is that it is the interpretive import, which is rooted in contrastiveness, what affects the interpretation of doubled quantified NPs and indefinites, and not due to the presence of clitics.

### 3.4.1.1 Romanian

It has been argued in the literature that *wh*-phrases and quantifiers undergo movement at LF to a position where they can bind a variable in the base position. The problem with quantificational elements involved in a CLLD I articulation, however, is that they are co-referential with clitics NOT variables, and hence they are barred to be participants in CLLD I. One of the most detailed works approaching this dilemma is found in Dobrovie-Sorin (1990). In what follows, I will take up her stand on this issue in more detail.

According to Dobrovie-Sorin (DS), Romanian instantiates two types of *wh*-words; (i) *cine* 'who', *ce* 'what', (ii) *care* 'which'. DS notes further that the two types of *wh*-words differ in an interesting way. In particular, while the first type disallows the presence of clitics in the base position (i.e. they must be bound by an empty category labeled as (e)), the second type requires them. Consider the examples in (40) and (41).

- (40) a. Pe *care* (baiat) l-ai vazut?  
           pe which (boy) him-have (you) seen  
           'Which one (which boy) did you see?'  
       b. \*Pe *care* (baiat) ai vazut?  
           pe which (boy) have (you) seen  
           'Which one (which boy) did you see?'
- (41) a. \*Pe *cine<sub>i</sub>* l<sub>i</sub>-ai vazut e<sub>i</sub>?  
           pe who him-have (you) seen e  
       b. Pe *cine<sub>i</sub>* ai vazut e<sub>i</sub>?

As can be seen in (40), the obligatory presence of a clitic is what sets apart the minimal pair in (40), compared to the pair in (41), which is characterized by the absence of clitics as a precondition on the grammaticality of the question formation. According to DS, the examples in (40) show the same properties of CLLD I in that they do not permit parasitic gaps and at the same time they do not show Weak Crossover effects, characteristic diagnostics of structural movement.<sup>15</sup>

The ungrammaticality of (40b) and (41a) is thought to boil down to the differences in the quantificational force for the two types of *wh*-constructions

<sup>15</sup>A crucial indicator that a certain sentence is derived by A-bar movement is the presence of Weak Crossover effects (WCO) according to which an operator (quantifier or *wh*-word) undergoes movement while binding two elements (Richards 2014); a trace left by movement operation and a pronominal, as exemplified in (a).

a. \*who<sub>i</sub> does her<sub>i</sub> mother love <sub>i</sub> ?



(42) a. Ce elev ai putea tu suporta?  
 what student could you stand  
 [cited as in the original]

b. \*Ce elev l-ai putea tu suporta?  
 which student him could you stand

As far as interpretative import is concerned, the obligatory presence of clitics in the context of *care*-constructions is intimately correlated with a pragmatic significance. More specifically, *care*-constructions as in (42a), which are typically doubled by a clitic, can be employed “if a certain set of students has already been mentioned or is implicit in a given dialogue”. *Ce*-constructions, however, do not share the same pragmatic import in that there is no “shared knowledge” in the pragmatic sense.

In this example, the *wh*-word undergoes movement to the C-area leaving behind a trace and simultaneously crossing (hence the name ‘crossover’) the subject pronoun ‘*her*’. The deviance of this construction is attributed typically to the inability of ‘*her*’ to receive a bound reading because it does not c-command the trace. WCO is typically distinguished from an analogous construction, labeled as Strong Crossover (SCO), where the pronoun c-commands the trace giving rise to a Condition C violation as exemplified in (a) below. For further discussion, see Postal (1971); Wasow (1972).

- 86



DS's words:

the [CLLD I] of bare quantifiers such as *nimeni* 'nobody', *ceva* 'something' ... are parallel to the *wh*-structures that involve bare *wh*-quantifiers such as *cine* 'who' and *ce* 'what' (p.347).

- (43) a. pe nimeni n-am supărat.  
          pe nobody not-(I) have annoyed  
      b. Ceva ai să descoperi si tu.  
          something (you) will discover you too
- (44) a. pe nimeni nu (\*I)-am suparat.  
      b. Ceva ai sa-(\*I) descoperi și tu. [cited as in the original]

The reason behind the resistance of clitics in the context of bare quantifiers is that these elements are specified for qu(antifier) features which mandates that the quantifier takes the clausal scope and binds a variable in the base position. Those quantifiers corresponding to *care*-constructions, however, are required to be linked to a clitic, and are not subject to QR.

- (45) a. \*Toti elevii tăi nu cred că pot examina  
          all the students your not (I) think that (I) can examine  
          mine.  
          tomorrow  
      b. Pe toti elevii tăi nu cred că-i pot examina  
          pe all the students your not (I) think that-them (I) can examine  
          mine.  
          tomorrow  
          'Pe all your students, I do not think that I can examine them to-  
          morrow.'

According to DS, the expression 'all your students' in (45b) behaves as a "dislocated definite NP (that is, a referential expression)" if it is linked to a clitic. Interestingly, the same holds true of indefinites as well. In particular, there is a semantic difference between the indefinites linked to variables and those linked to clitics. Consider the following examples.

- (46) a. un elev<sub>i</sub> fiecare profesor va fi in stare să examineze e<sub>i</sub>.  
          a student<sub>i</sub> each teacher will be able to examine e<sub>i</sub>  
      b. pe un elev<sub>i</sub> va trebui să-li examineze e<sub>i</sub> fiecare profesor.  
          pe a student<sub>i</sub> will have to-him<sub>i</sub> examine e<sub>i</sub> each teacher

In (46b), the dislocated indefinite NP "can only take specific and referential reading(s)". This state of affairs is attributed to the assumption that the differ-

ences between variables and clitics in the context of dislocation constructions is one of a semantic import in that variables range over many unspecified elements, contrary to clitics which refer to salient entities in the discourse.

To sum up, atypical topics linked to clitics in the base position have a semantic import in Romanian; i.e., they are obligatorily taking specific/referential readings. One way to capture the specific reading of atypical topics is to propose that there is an asymmetry between specific and nonspecific reading at LF. Put otherwise, specific-nonspecific dichotomy can be represented syntactically in that the non-specific reading is obtained only if QR is involved. In this case, the quantifier undergoes movement at LF leaving a variable behind. The specific reading, however, is obtained under two conditions: (i) there is no QR involved and (ii) the obligatory presence of clitics. In DS's words, "if a clitic is present, no variable is available, which correlates with the specific/referential and wide-scope readings".<sup>16 17</sup>

### 3.4.1.2 Italian

Having touched upon the behavior of atypical topics in Romanian, I turn now to Italian. Let us start with the seminal work of Cinque (1990). One of the salient properties of Italian is that it instantiates a CLLD I configuration whereby there is a dXP which is co-referential with a clitic in the IP-internal position. Abstracting away from the details of this construction, already addressed in chapter 2, one cannot miss the fact that the obligatory presence of clitics in the context of quantificational topics has a semantic import. In particular, bare

<sup>16</sup>There are other ways, however, to account for the interpretive content of clitics in syntactic terms. A prominent strand of analyses to this effect is found in the so-called 'Big DP' hypothesis (Uriagereka 1995; Cecchetto and Chierchia 1999), according to which clitics are (D)eterminer heads. Another earlier treatment is grounded in Suñer (1988)'s Matching Principle, according to which there can be no clash in features between the clitic and its associated element, with the semantic restriction that clitics are inherently specified as [+specific]. Crucially, Suñer treats clitics as markers of object agreement and hence clitic doubling under this analysis is taken to be an instance of subject-verb agreement. Although these analyses can account for the referential force of clitics, there are good reasons, however, casting a shadow of doubt on their validity in a sense to be explicated in some detail in section 5.4.1.

<sup>17</sup>Unfortunately, though, DS's proposal does not go unchallenged. In particular, Alexopoulou and Kolliakou (2002: p.225, fn.16) note that, contrary to DS's analysis, "a one-to-one mapping between structure (clitic vs. gap) and interpretation does not hold". A case in point is Focus Movement in Greek, where it is argued that this configuration yields ambiguous readings, contrary to CLLD I and topicalization, which do not. Another problem highlighted by Alexopoulou and Kolliakou is that the LF representations proposed by DS to model the specific/non-specific readings do not account for the non-specific reading: "the LF representation 'There is an x, such that x is a secretary and I look for x' can represent only the specific reading, not the non-specific one, in contradistinction to DS's assumption; see also Alexopoulou (1999: p.126f).

quantifiers such as *qualcosa* “something”, *qualcuno* “someone” can be dislocated, while the presence of a clitic can be obligatory under certain conditions related to specificity effects (47). This state of affairs is different as far as quantified NPs are concerned, the presence of clitic being obligatory (49). In Cinque’s (1990: p.15) words:

if the object phrase in TOP (an A-bar position) is bare quantifier:  
*qualcosa* ‘something’, *qualcuno* ‘someone’, though not if it is a quantified NP ..., the resumptive pronoun may be missing.<sup>18</sup>

- (47) a. Qualcuno, (lo) troveremo.  
           Someone we (him) will find  
       b. Qualcosa, di sicuro, io (la) farò  
           Something surely (it) has made.
- (48) Molte lettere, lui \*(le) butta via  
       Many letters he (them) throws away.

As can be seen in (48), the co-occurrence of clitics and quantified NPs are obligatory in Italian. But, this does not hold true of bare quantifiers as in (47) which can be related to clitics in the host clause depending essentially on “the referential properties of the quantifiers” (Cinque 1990: p.15). That is to say, specific reading of quantifiers plays a critical role in licensing the presence of clitics in the context of a CLLD I articulation. When uttering the sentences in (47) with the clitic, the speaker is understood to convey information concerning a highly specific entity in the discourse. However, if the speaker wants to refer to unspecified entities, the presence of clitics is impossible. Therefore, the correlation bare quantifier-clitic is necessarily subject to specificity effects in that only referential/specific readings of bare quantifiers in CLLD contexts is a possible option in Italian. According to Cinque, those quantifiers which are used in a

---

<sup>18</sup>This observation needs to be qualified, though. In particular, Cinque (1990: p.75-76), argues that the optionality of clitics co-occurring with bare quantifier phrases is apparent. A case in point is the peculiar behaviour of *qualcosa* ‘something’. According to Cinque, this element is affected by gender features: while it has masculine gender when used as a bare quantifier (and hence the clitic is obligatorily missing), it has feminine gender when used as a quantified NP (and hence the clitic is obligatory). This is illustrated below.

- a. Qualcosa, prima o poi \*(la) farò.  
       something sooner or later it-FEM I will do  
       ‘I will do it sooner or later’  
       b. Qualcosa, prima o poi (\*lo) farò.  
       something sooner or later it-MASC I will do  
       ‘I will do it sooner or later’

non-referential sense are “intrinsic operators” which are qualified to bind only variables not clitics. This conclusion gives rise to the fact that one cannot dissociate between specificity and the presence of clitics in certain configurations (as in CLLD I for example).

Rizzi (1986: p.395f) observes by contrast that quantified NPs such as *nessuno* (“nobody”) and *tutto* (“everything”) cannot be dislocated in Italian as depicted in (49). These NPs, however, can be topicalized, with the proviso that focal stress is put on the topicalized element (50).

- (49) a. \*Nessuno, lo canosco in questa citta.  
 Nobody, him I know in this city  
 “Nobody, I know him in this city.”  
 b. \*Tutto, lo diro’ alla polizia.  
 Everything it I will say to the police  
 “Everything, I will say to the police.”
- (50) a. NESSUNO, conosco in questa citta.  
 “Nobody, I know in this city.”  
 b. TUTTO, diro’ alla polizia.  
 “Everything, I will say to the police.”

Rizzi (1986: p.395)

On the basis of these data, he proposes the constraint in (51) to capture the contrast between (49) and (50).

- (51) A pronoun cannot be locally bound by a (non-lexically-restricted) quantifier.

Although he notes that lexical-restrictive quantifiers can be CLLD I-ed, he does not provide data to confirm this conclusion. In his seminal paper on the left periphery of the clause, however, Rizzi (1997: 249-295) explicitly argues that CLLD I-ing quantifiers is possible if they co-occur with a lexical restriction as exemplified in (52).<sup>19</sup>

- (52) Molti libri, li ho buttati via  
 “Many books, I threw them away”  
 ‘I throw way many books’

<sup>19</sup>According to Rizzi (1997), the sentence depicted in (52) is totally fine in Italian. His explanation for the grammaticality of this sentence goes as follows; the quantifier ‘*Molti*’ undergoes the usual Quantifier Raising (QR), which presupposes the presence of bound variables, yielding the following LF representation:

- a. Molti ec TOP, [ lo ho buttati via] ec = empty category ( i.e. variable)

All in all, Italian data, especially in Cinque (1990), is similar to Romanian in that atypical topics linked to clitics are obligatorily interpreted as specific/referential entities bearing the type [e] in the semantic representation. In CLLD I contexts, “quantified NPs behave as Names rather than operators” (Cinque 1995: 112). This conclusion, once again, sheds more light on the efficient role of clitics at the interpretive level in the phenomenology of dislocation.<sup>20</sup>

### 3.4.1.3 Greek

Having discussed the Italian data, I turn now to Greek which instantiates atypical topics linked to clitics. Contrary to Italian which seems to exhibit optionality pattern with respect to clitic placement in the context of quantificational dXPs, Greek does require clitics if the base quantifier is displaced. According to Anagnostopoulou (1999b: p.88-89 fn.5), this structural choice is essentially correlated to a specificity constraint on the interpretation of bare quantifiers appearing in the left periphery. Consider the example in (53).

As it stands, no principle is violated here: “the quantifier binds the variable within the SPEC-TOP, which is in turn connected to the pronoun”. Indeed, this parasitic’ relation between the variable and the clitic is examined explicitly in Rizzi (1986: 395): “pronouns cannot function as primary variables, and can acquire variable status only parasitically, through binding from licit primary variables”. Baker (1996: 53-54) interprets this ‘parasitic’ relation by assuming that pronouns can be variables if they are c-commanded by a trace. This interpretation can be corroborated by the following example.

- a. Who<sub>i</sub> loves his<sub>i</sub> teacher?
- b. LF. [who<sub>i</sub> loves [t<sub>i</sub> his<sub>i</sub> teacher]]

The sentence in (a) is not an instance of vacuous quantification. In particular, the *wh*-phrase ‘*who*’ appears in an A-bar position as the SPEC-CP, while its trace, which is in an A-position, binds the possessive pronoun ‘*his*’. As it stands, the possessive pronoun in (a) is given a bound variable interpretation by virtue of its parasitic relation with the trace.

<sup>20</sup>It is my contention that the implicit hypothesis underlying this conclusion follows from an old observation made in Postal (1966: 203): “My basic claim is that the so-called pronouns *I*, *our*, *they*, etc. are really articles, in fact types of definite articles.” A radical formulation of this stance with respect to the referential power of clitics, *qua* personal pronouns, have been advanced vividly by Dimitrova-Vulchanova and Hellan (1999: 484)

Being personal pronouns in nature, we assume that the pronominal clitics individually should be characterized by a feature specific, which signifies that the expression in question is used about an entity or matter which is being identified by the speaker (or some individual mentioned in the discourse) as a particular entity (often described as a case of “having the entity in mind).

Although Dimitrova-Vulchanova and Hellan notice that their generalization cannot go through in cases where personal pronouns can be used non-specifically (cf. the pronoun ‘*he*’ in the sentence *The new director has not been selected yet, but he will clearly have to do an extensive house-cleaning*), they reaffirm that “the specific type of use is so typical of this word class that the pronominal clitics have acquired “specific” as a grammaticalized semantic feature”.

- (53) a. Kapjon i Maria \*(ton) epjase na antighrafi  
 Someone, the Mary \*(him) found-3SG to cheat  
 'Mary found somebody cheating'
- b. \*Kapjon tha vrume (alla den kserume pjon)  
 Someone will find-we (but we don't know whom)  
 'We'll find someone (but we don't know who)'

The contrast in grammaticality between (53a) and (53b) is attributed to the fact that when the quantifier is CLLD I-ed, it must co-occur with a clitic in the IP-internal position, and be interpreted as specific.

The presence of clitics in the context of atypical topics (eg. indefinite) is argued to be obligatory in Greek (Alexopoulou and Kolliakou 2002). In particular, the clitic *ton* in (54) cannot be dropped since its associate (i.e. dXP) it is linked to in the left periphery denotes a salient member of sets in the discourse (i.e. specific entities).

- (54) Ena filo mu \*(ton) psahno apo htes  
 a friend-ACC of-mine MASC.3SG.ACC look-for-I.SG since yesterday  
 ke den boro na ton vro puthena.  
 and not be-able to MASC.3SG.ACC find anywhere  
 'Since the day before yesterday I've been looking for a friend of mine  
 and I cannot find him anywhere'.

In her discussion of *wh*-words, characteristic of quantificational configurations, Iatridou (1995) notes that the possible occurrence of clitics with *wh*-words in Modern Greek (MG) varies depending on the *wh*-element under discussion. As such, *who*-phrases cannot be linked to clitics in contrast to *which*-phrases as exemplified in (55).

- (55) a. Pion (\*ton) idhes ?  
 Who CL saw ?  
 'Who did you see'
- b. pia pedhia (ta) malos  
 which children them scolded  
 'which children did you scold?'

The reason why *who*-phrases resist clitics in MG is that *who*-phrases are not (d)iscourse linked and hence they are barred in quantifier-clitic chain. *Which*-phrases, however, tolerate the presence of clitics in their domain by virtue of d-linked interpretation they receive. Iatridou maintains that:

(t)he two expansions of (48a) [here 55b] (with and without a clitic)  
 are not synonymous. Without the clitic, the sentence means some-

thing like “in the group of scolded people, which children fit?”, while with the clitic it means “of the mentioned children, which ones did you scold?”. In other words, the expansion with the clitic has a different domain of discourse.

#### 3.4.1.4 Interim conclusion

I have discussed in the foregoing how quantificational elements can be linked to clitics in three languages: Romanian, Italian and Greek. The generalization which can be induced from the data above is that quantificational expressions associated with clitics do not behave as denoting unspecified elements, but on the contrary their referential force is comparable to proper names. In compositional-semantic terms, it can be argued that there is a type shifting mechanism which licenses the appearance of these elements in the left periphery.

### 3.4.2 Contrast and atypical topics in MSA: the proposal

In section 3.2.3, I concluded that given that referentiality as symptomatic of topics is a widely-held assumption in the literature, I keep this notion as being a necessary condition on topics in MSA, but it is not a sufficient one as far as the left periphery in MSA is concerned: it is secondary to another encompassing information-structural notion viz., contrast. More specifically, what underlies a referential interpretation of left-dXPs in MSA is whether a dXP is drawn from a contrast set. In sense, this claim subsumes referentiality under the notion of contrastiveness.

In this subsection, I argue that this claim has a non-trivial impact on the interpretation of atypical topics. To begin with, the most important reservation I have with the previous literature examined in 3.4.1 is that it is unclear to me in what sense that clitics by their own can delimit the interpretive possibilities of *all* topics. For one thing, it is my contention that this position will miss a well-established asymmetry underlying the distinction between purely referential and non-referential elements (Abbott 2004). For concreteness, consider the example in (56): while (56a) involves a dislocated proper name, (56b,c) do a quantified NP and an indefinite NP respectively.

- (56) a. aliy-an qablatu-hu  
           Ali-ACC met.1SG-him.ACC  
           ‘I met Ali’



- b. kull almudarisin-a qablatu-hum  
all the-teachers.ACC met.1SG-them.ACC  
'I met all teachers'
- c. syarattan ʔʃtrytu-ha  
car-ACC bought.1SG-it.ACC  
'I bought a car''

On the assumption that clitics can constrain the interpretation of the quantifier phrases, as advocated by the literature examined in section 3.4.1, it can be argued then that *kull almudarsin-a* is assigned a specific reading due to the referential power of clitics. The problem, however, is that the clitic in (58a) seems to be referentially redundant; that is, its presence does not 'referentially' contribute to the overall proposition, since it is already related to a proper name; an archetype of definiteness (Abbott 2004). If one follows the previous literature examined in section 3.4.1, it is obliged then to maintain the implicit hypothesis that there is a specificity/referentiality condition imposed on the clitic forcing a topicalized *proper name* to obtain a referential value; so strong conclusion, I believe.<sup>21</sup> In fact, this glitch is the impetus for my proposal, which rests upon two tenets: (i) clitics are 'argumental creatures' in Arabic dislocation; they are there as a morphosyntactic requirement to satisfy the valency of the predicate, i.e. they are arguments bearing  $\theta$ -roles<sup>22</sup> and (ii) the felicity of atypical topics in MSA is contingent on contrastiveness, and orthogonal to the assumed 'interpretive effect' of clitics. Since this chapter is concerned with the interpretive issues of Arabic dislocation, I postpone discussion of the first tenet to section 5.4.1.1, where I show that a morphological analysis of clitics in MSA cannot be maintained.

As for the second tenet of my proposal, I follow in spirit (Arregi 2003;

<sup>21</sup>One may wonder "how the situation is any different in this respect from an 'ordinary' case of a referential pronoun being anaphorically linked to an earlier mentioned referential NP". It is my contention that we have to make a distinction between inherently referential elements such as proper names, and those elements which are not. If we follow the previous literature, we will end up with a strong conclusion: clitics can constrain the interpretation of dXPs, regardless of *definiteness strength*: after all, proper names can refer in the absence of clitics, unlike indefinites and QPs. Instead, we need an encompassing, and indeed analytically economical, value which can account for how Arabic dXPs are interpreted. As I argue below, this analytic value is rooted in contrastiveness. Thanks to Peter Ackema for bringing this to my mind.

<sup>22</sup>According to De Cat, clitics in Spoken French are topicality markers. As a precondition, an XP is dislocated and assigned a topic interpretation if and only if it cooccurs with an argumental clitic. This turns out to have an interpretive import to the extent that the clitic in quantificational configurations is given a fixed reference. While my proposal agrees with the first part of De Cat's proposal, it takes issues with the second part of her proposal, *viz.*, clitics have an interpretive import.



Leonetti 2013; Kiss and Gyuris 2003) that contrastiveness is so essential as far as atypical topics are concerned. To show that this is the case, a little legwork is required. To a first approximation, let us start with Suñer (1982)'s 'Naked Noun Constraint', depicted in (57), and cited in Leonetti (2013: p.121).

- (57) An unmodified common noun in preverbal position cannot be the surface subject of a sentence under conditions of normal stress and intonation.

According to this constraint, the preverbal surface subject in Spanish cannot be determinerless as in (58).

- (58) \*Turistas llegaron a la ciudad.  
Tourists arrive-PST-3PL to the city  
'Tourists arrived in the city'.

Certain conditions having to do with information structure, however, can override this ban on determinerless bare plural subject in Spanish: "conditions of normal stress and intonation" typical of focus (59a) and topic (59b) can yield grammatical strings.<sup>23</sup>

- (59) a. TURISTAS llegaron a la ciudad.  
Tourists-FOC arrive-PST-3PL to the city  
b. Turistas, llegaron (pero no demasiados)  
tourists arrive-PST-3PL (but not too. many)

Later in her book, Suñer (1982: p.231) attributes the grammaticality of (59a) and (59b) to the notion of contrastiveness: "left dislocated naked nouns are

<sup>23</sup>Due to space reasons, I cannot provide a detailed discussion of topicalized bare plurals in MSA as in (a), which can be mingled with other atypical topics cited in the main text.

- a. ?tfal-an ray?tu-hum fi ?lmadr?səti  
children-ACC saw.1SG-them-ACC in the school-GEN  
'I saw children in the school'

A thread running through the literature on English bare plurals is that information structural notions are correlated with a given interpretation of bare plurals: existential bare plurals are focused and generic bare plurals are interpreted uniformly as topic expressions (Cohen and Erteschik-Shir 2002). Put otherwise, according to Laca (1990), generic ('inclusive' in her parlance) bare plurals are typically presupposed (i.e. topicalized), while existential ('non-inclusive' in her parlance) bare plurals are asserted (i.e. focused); see also Leonetti (2013) and references therein. Complicating the issue somehow, Fassi Fehri (2012) maintains that the existential reading is considered as the null hypothesis in the interpretation of bare plurals in MSA, in contrast to genericity which can be attained only in the presence of certain predicative/lexical elements. To a first approximation, and if my proposal in the main text is on the right track, bare plurals can be topic expressions if they denote a 'generic specificity' interpretation as explicated below. I leave this interesting matter to future research.

thematic but *contrastive*...naked nouns cannot be non-contrastive themes" (italics mine). See also [Ordóñez and Treviño \(1999\)](#) for a proposal that preverbal subjects in Spanish have the status of a dislocated element.

By the same token, [Arregi \(2003\)](#) extends this line of reasoning to account for CLLD I-ed quantifiers phrases: they must be interpreted as contrastive topics. Consider the following minimal pair.

- (60) a. \*Algo Juan lo leyó ayer  
 something Juan it read yesterday  
 'Something, Juan read yesterday'
- b. Algunos libros, Juan los leyó ayer  
 some books Juan them read yesterday'  
 'Some books, Juan read yesterday'

According to [Arregi](#), the reason why (60b) is grammatical is that *Algunos libros* is drawn from a contrast set: "this set is a salient set of books, and *Algunos libros* denotes a subset of this set". On the contrary, *algo* in (60a) cannot be used in contrastive contexts, the reason being that this element defies reference to a salient set of individuals. This is, in essence, the proposal made in [Constant \(2014\)](#) and [Kiss and Gyuris \(2003\)](#), with slight modifications in implementation. More specifically, ([Constant 2014](#): p.167) citing [Rooth \(2005\)](#) argues that the contrastive topic marking of quantifiers should not be understood such that there are alternatives of the same semantic type; i.e.,  $\langle\langle e,t \rangle, t \rangle$ . Rather, "quantifiers marked as contrastive topics set up contrasts with *individual*, not with GQ [Generalized Quantifier] meanings" (italics mine). Similarly, [Kiss and Gyuris \(2003\)](#) argue at length that non-individual-denoting expressions such as quantifiers can be assigned a topic interpretation if they are "individuated by being set into contrast". Needless to say that discussion of these contributions in their entirety will take us too far afield, and hence the reader is referred to the cited works and references therein for further discussion.

The emerging picture so far points to the conclusion that contrast is vital for the interpretation of atypical topics. The question is: why does contrast matter? The short and the long of my answer is that contrast entails specificity/definiteness in the sense of [Enç \(1991\)](#). In particular, [Enç \(1991](#): p.9) notes that definiteness and specificity should be understood as related phenomena: "(b)oth definites and specifics require that their discourse referents be linked to a previously established discourse referent". Nonetheless, she makes an important distinction between the two notions, which lies in "the nature of linking". The crucial claim is that definite NPs are regulated by an identity re-

lation; they take strong antecedents in the discourse, which are epitomized by proper names. What underlies specifics, however, is the inclusion relation, which "involves a weaker, looser relation to already established referents". These referents are dubbed 'weak antecedents'. Capitalizing on this invaluable theoretical tool, it is time to interpret the sentences in (56), which I take to be representative of atypical and typical topics occurring in Arabic CLLD I. To begin with, the encompassing value underlying typical and atypical topics is contrastiveness: the idea that topics are drawn out of contrasted alternatives. Crucially, not all of these contrasted elements have the same linking relation in the sense of [Enç \(1991\)](#). That is, CLLD I-ing a proper/referential element suggests that there is a strong antecedent in the discourse, which is contrasted with a similar element in terms of definiteness strength (i.e. a proper name).

As for atypical topics, they have weak antecedents, which require the most specific possible interpretation. To obtain this specific interpretation, contrast comes into play to constrain the range of interpretations that an indefinite or a quantifier phrase may have by triggering a generic reading. That is, generic indefinites and quantified NPs in MSA are associated to a contrast set when they are dislocated; see [Erteschik-Shir \(1997: p.121\)](#) on the behavior of generic indefinites. For instance, a generic indefinite such as *a car* in (56c) is licensed by a contrast set which is available in the discourse, i.e., [a house, a bicycle etc.]. The same logic applies to quantified NPs of the sort depicted in (56b): '*all the teachers*' is drawn from a contrast set made available by the context, i.e., [the employees, the soldiers etc.]. What this suggests is that CLLD I-ing atypical topics is a strategy to mark what I call '*generic specificity*' in MSA: atypical topics are CLLD I-ed if they are generics. Under the assumption that generic readings are referential ([Erteschik-Shir 2013](#)), this therefore means that an existential reading is blocked under this context ([Diesing 1992](#)): atypical topics do not refer to a particular individual; they transcend particular situations. This is, in essence, the proposal made in [De Cat \(2007: p.83\)](#) to account for indefinite topics in spoken French; they are assigned a generic reading and hence they can appear in a topic position. I extend this observation to include quantifiers in MSA. In (56b), for example, no particular teachers are being referred to, but it is a general statement that someone has met the kind 'teacher'. The same applies to instances of indefinite topics as shown in (56c): the proposition is not meant to refer to an individual car, but it makes a reference to the kind 'car'.<sup>24</sup>

---

<sup>24</sup>For further discussion on genericity, see [Carlson and Pelletier \(1995\)](#), and [Jaber \(2014\)](#) on genericity in MSA.

Crucially, then, the interpretation of Arabic dislocation is “retrieved from the denotation” of the dXP itself, instead of being determined by the assumed interpretive content of clitics, contra [Gutiérrez-Rexach \(2001: p.121\)](#).<sup>25</sup>

The observations examined so far suggest the following conclusion:

(61) *The Interpretation of CLLD I and CLRD I in MSA (Final version)*

Dislocation of XP in MSA is felicitous iff XP is drawn from a contrast set.

It is my contention that this statement captures an asymmetry underlying the interpretation of ‘atypical topics i.e., since contrastive focus is an interpretive strategy to mark right-peripheral elements, it follows then atypical dXPs resist partaking in Arabic CLRD I due to their inability to exhibit exhaustiveness in the sense explicated in section 3.3.3.2; atypical topics in Arabic CLLD I, on the other hand, can receive a contrastive topic reading, and this is what makes them felicitous from an interpretive perspective. One way to explain this asymmetry is by recourse to metaphors in the sense of [Leonetti \(2007, 2008, 2013\)](#), that is, contrast is the price that a typical topic has to pay to be felicitous as a topic in the Arabic left periphery. Atypical topics in CLLD I do pay this price, and thereby they are given access to the domain of CLLD I.

<sup>25</sup>Whatever the particulars of other possible characterizations of quantified NPs in a CLLD I articulation, the working assumption in this thesis is that the contrastive reading of atypical topics can restrict the domain of their quantification. An interesting treatment, not identical to my proposal though, which merits highlighting, is advanced by [Alexopoulou \(2008\)](#). To begin with, she notes that there are exceptions to the generalization that quantifiers resist CLLD I in Greek. These exceptions involve generic statements as in (a). Building on [Fox and Sauerland \(1996\)](#), [Alexopoulou](#) maintains that “in situations restricting the domain of the generic operator the universal quantifier *every* is trivialized because each relevant situation involves a single individual”. As such, the generic operator for the example in (a) ranges over the situation depicted in (b). Crucially, this situation involves a single man, which can be paraphrased as the sentence illustrated in (c). According to this analysis, the pronominal is an E-type pronoun ([Evans 1980](#)).

- a.      kathe adra      ton agapai   mia yineka  
          each man-ACC him love-3SG a    woman  
          each man a woman loves
- b.      For every relevant situation *s*, for every man in *s* a woman loves [the man in *s*]—*him*
- c.      to Yani          ton agapai   mia yineka  
          the Yanis-ACC him love-3SG a    woman  
          Yanis a woman loves.

In a related, though not similar, proposal, [Arregi \(2003\)](#) maintains that CLLD I-ing quantifiers is possible if “the clitic is interpreted as an individual variable”.

### 3.5 Conclusion

In this chapter I have explored and examined the interpretation of dislocation configurations with focus on MSA. In particular, I argued that the left periphery in this language can host contrastive topics, contrary to CLRD I, which can have contrastive focus. *Contra* the previous literature which puts a special emphasis on the interpretive content of clitics to derive the possible occurrence of atypical topics in the left periphery, I argue instead that it is the contrastive content of the dXP what underlies the interpretation of atypical topics in MSA. Now that I finish characterizing CLLD I and CLRD I along with how they are interpreted, in the next chapter I will zoom in on the syntactic facet of these configurations.

## Chapter 4

# It is a Single Clause! – The Monoclausal Analysis

### 4.1 Introduction

The main goal of this chapter is to review the previous approaches to the syntax of CLLD I and CLRD I in MSA as well as in other well-researched languages. As is well-known, the literature on CLLD I is vast, and hence reviewing all proposals in their entirety will not do any justice to them given this move will lead to a fragmentary overview. Rather, I focus in this chapter on four main proposals, which suggest themselves as good representatives of the recent literature; see the contributors to the classic volume on dislocation edited by [Anagnostopoulou et al. \(1997\)](#). In a nutshell, the locus of disagreement among these proposals is how best to account for the derivation of CLLD I: by movement or base-generation. With the advent of [Cinque \(1990\)](#), research on dislocation goes through a new phase, where it is admitted that CLLD I has a two-sided nature in that it simultaneously displays the properties of movement and base-generation. After [Iatridou \(1995\)](#), this comes to be known as ‘Cinque’s paradox’.<sup>1</sup> As far as CLLD I in Arabic is concerned, the

---

<sup>1</sup>Philosophically speaking, ‘paradox’ has been defined succinctly by [Sainsbury \(2009: p.1\)](#). He writes:

This is what I understand by a paradox: an apparently unacceptable conclusion derived by apparently acceptable reasoning from apparently acceptable premises. Appearances have to deceive, since the acceptable cannot lead by acceptable steps to the unacceptable. So, generally, we have a choice: Either the conclusion is not really unacceptable, or else the starting point, or the reasoning, has some nonobvious flaw.

In the next chapter, I will show that it is the ‘starting point’ in the analysis of CLLD I and CLRD I that gives rise to an ‘unacceptable conclusion’.

proposals are strikingly divergent, ranging from the assumption that CLLD is derived solely by base-generation (Ouhalla 1994a, 1997), to the hybrid claim that CLLD I in Arabic can be derived by both base-generation and PF movement (Aoun and Benmamoun 1998). Interestingly, neither of these proposals engages with Cinque's paradox altogether. On the other hand, there is a line of thought within the Arabic syntax literature basing CLLD, implicitly though, within the territory of the cartography program (Shlonsky 2000), according to which the dXP undergoes movement to a dedicated position in the C-area to check off a relevant information-structural feature.

Given the fact that CLRD I is rarely raised in the modern Arabic literature, I review recent proposals in Romance languages to check whether or not the Arabic data meshes well with these proposals. Interestingly enough, despite the fact that the literature on CLRD I is not vast<sup>2</sup>, the relevant proposals are empirically and analytically diverse; see Samek-Lodovici (2015) for a comprehensive overview. Of these proposals, three analyses stand out. The first one concerns where the dXP appears in the skeleton of the clause: while some authors maintain that the dXP surfaces in a position above TP via syntactic movement (Samek-Lodovici 2006, 2015), others contend that the dXP is base-generated in a position above TP (De Cat 2002, 2007). The second one argues for a middle position for the dXP, particularly in a position below TP but above VP.<sup>3</sup> The final one claims that right-dislocation is a class of clitic doubling, where the dXP is left-dislocated at LF (Kayne 1994). In short, right

---

<sup>2</sup>For one thing, this can be attributed to the fact that this sentential area has gone unnoticed in the generative literature until recently; though some insightful and original observations are made in Ross (1967: 236). In López (2009: p.6)'s parlance, "(u)ntil recently, right dislocation [[CLRD I]] could be considered the Cinderella of Romance syntax."

<sup>3</sup>This approach to right dislocation is not addressed here. In a nutshell, unlike the mirror hypothesis of Vallduví (1990, 1992), the original observation of this approach is that there are indeed differences between CLLD I and CLRD I which can be only captured by locating the former in the left periphery in the clause, while the latter appears in the center periphery. In other words, CLLD I is taken to c-command asymmetrically CLRD I. Adherents of this approach include Belletti (2001), Villalba (2000) and Cecchetto (2000), among others. According to this analysis, it is proposed that the right-dXP targets 'the center periphery' (Camacho 2003), specifically in the area between the IP and VP, as illustrated by the representation in (a).

a. [IP [dXP [VP] ] ]

The adherents of this approach propose structural diagnostics to enhance this position. For the list of diagnostics, see López (2009) and Feldhausen (2010). An immediate objection to this approach comes from agreement asymmetry in MSA. As is well-known, SVO in MSA exhibits full agreement, in contrast to VSO (Fassi Fehri 1993). What is relevant is that Ouhalla (1994b: p.54) observes that when the subject is right-dislocated in MSA, the verb shows full agreement. Compare between (a) and (b).



dislocation is a CLLD I articulation in disguise. Despite the diversity of these approaches to the phenomenology of right-dislocation, they share one crucial property: they are mono-clausal in that the dXP and its associated clitic coappear in the same clause. Hence, this chapter is meant to be an exploration into the merits as well as shortcomings of the monoclausal approaches to dislocation.

This chapter is divided into six core sections. Section 4.2 deals with three representative works; Demirdache (1991, 1997), Cinque (1990) and Iatridou (1995). Essentially, these proposals are diverse w.r.t the derivational history of CLLD I. In a nutshell, Demirdache argues that it is the clitic which undergoes movement at LF, while Cinque argues for a mechanism dubbed Binding Chain to account for the unexpected behavior of CLLD I which is claimed to display the properties of movement or base-generation. By contrast, Iatridou takes a balanced position towards what she dubs ‘Cinque’s paradox’, acknowledging that the Janus-faced behavior of CLLD I can be accounted for by assuming that both base-generation and movement are involved. In section 4.3, I discuss two proposals w.r.t CLLD I in Arabic: Aoun and Benmamoun (1998) and Ouhalla (1994a, 1997). While these authors agree that CLLD I in Arabic is derived by base-generation, the former adds an analytic possibility: PF movement. Section 4.4 is concerned with CLRD I. It is organized as follows: in section 4.4.1, I discuss the seminal work of Kayne (1994) in which it is maintained that the right dXP appears as the complement of V head in syntax, and then undergoes movement at LF. In section 4.4.2, I discuss two analyses in relation to CLRD: TP-external analyses (i.e. movement vs. base-generation). I turn then in section 4.4.3 to unresolved problems related to monoclausal approaches to right dislocation. Section 4.5 is concerned with the cartography program. In

- 
- a. raʔa-uu Zayd-an, al-ʔawlad-u  
saw.3PL Zayid-ACC the-boys-NOM
  - b. \*raʔa-a Zayd-an, al-ʔawlad-u  
saw.3SG Zayid-ACC the-boys-NOM  
‘The boys saw Zayid.’

On the assumption that movement to SPEC-IP is an agreement-triggered operation (Chomsky 2001; Miyagawa 2010), this suggests that the right-dXP in MSA must have gone through SPEC-IP (Fernández 2013) contrary to the proponents of the center periphery; but see Benmamoun and Lorimor (2006) for a proposal that agreement weakening does apply in VOS orders (thanks to Peter Ackema p.c. for bringing this to my mind). It should be noted moreover that I set aside crucial proposals pertaining to both CLRD I and CLLD I. For example, Suñer (2006) argues for a base-generation account for CLLD based on the behaviour of epithets, the connection between the dXP and its associated clitic being carried out by Chomsky’s (2001) operation of Agree; see López (2009) for criticism. As far as CLRD I is concerned, Cardinaletti (2002) fleshes out an analysis, according to which the right-dXP is base-generated in a low position outside the clause proper; see Samek-Lodovici (2015) for a dissenting view.



section 4.5.2 I briefly discuss Shlonsky (2000), where it is argued that Arabic instantiates a cascade of functional projections in the left periphery following Rizzi (1997). I turn in section 4.5.3 to highlight possible problems that the cartography approach has to face. Importantly, each proposal is followed by an extensive discussion to highlight its merits as well as its drawbacks. Section 4.6 concludes.

## 4.2 Clitic Left Dislocation (CLLD I)

### 4.2.1 Demirdache (1991, 1997): CLLD is derived by LF movement of the clitic

In her analysis of dislocation under resumption, Demirdache (1991, 1997) proposes that resumptive pronouns (RP hereafter) are the in-situ counterpart of a null operator.<sup>4</sup> The underlying assumption for this analysis is that RPs behave like gaps in that both configurations have identical LFs: they contain an A'-trace at LF. To capture this parallelism in configurational means, she employs locality constraints and parasitic gaps. First, it is standardly assumed that extraction out of a coordinate construction is barred (cf. Coordinate Structure Constraint CSC). This is shown in (1).

- (1) \*What<sub>i</sub> did you buy a book and t<sub>i</sub>?

The only permissible CSC violation is when extraction targets both conjuncts (cf. Across-The-Board, ATB), as illustrated in (2).

- (2) What<sub>i</sub> did you [eat t<sub>i</sub>] and [drink t<sub>i</sub>]?

According to Demirdache, dislocation structures with RPs in Hebrew seem to violate ATB, in that extraction targets only one conjunct. By way of illustration, consider the minimal pair in (3a,b).

- (3) a. ha'-iš še rina [<sub>VP</sub> roca e] ve [<sub>VP</sub> 'ohevet e] youter  
'the-man that Rina wants and loves more

<sup>4</sup>As rightly noted by Caroline Heycock (p.c.), the term 'null operator' is a bit confusing in this context. Generally speaking, 'null elements' refer to entities which lack phonetic representations. But, this is not the case with clitics, which are pronounceable. According to Demirdache (1997: p.194), as is the case with a null operator, "an RP is a pronominal operator that does not range over anything. Its range is fixed via co-indexation with an NP in an A'-position". She however argues that an RP is different from a null operator in two aspects: (i) it is not silent, meaning that it is pronounceable, and (ii) "it is in situ at S-structure - that is, it does not undergo overt S-structure movement but covert LF- movement".

mikulam].  
than anyone'.

- b. ha'-iš še rina [<sub>VP</sub> roca **e**] ve [<sub>VP</sub> 'ohevet 'oto youter  
'the-man that Rina wants and loves him more  
mikulam].  
than anyone'.

(Demirdache 1997: p.206)

Unlike the sentence in (3a), the sentence in (3b) shows that the occurrence of RPs are not consistent with ATB, which requires that movement must target both conjuncts. Given the fact that ATB requires parallel extraction, the occurrence of the RP *oto* 'him' should render the sentence in (3b) ungrammatical. Surprisingly though, the sentence is grammatical. This can be explained by assuming that RPs undergo covert movement at LF, which entails that ATB is obeyed in that extraction is involved in both conjuncts. The difference between (3a) and (3b), thus, boils down to the level at which movement applies: while movement in (3a) operates in overt syntax, movement in (3b) occurs at LF.

Second, RPs can license parasitic gaps as shown in (4).

- (4) ha' iša ha'-anašim še šixnati levaker **e<sub>i</sub>** te' aru 'ota<sub>i</sub>  
the-woman the-people that convinced-I to-visit described her  
'the woman that the people that I convinced to visit described her'  
(Demirdache 1997: p.206)<sup>5</sup>

According to Demirdache, the gap in (4), labeled as [e], is dependent on the RP, which is unexpected given the behavior of parasitic gaps originally proposed in Engdahl (1983), which assumes that the gap is typically licensed by a true trace. The question is how the gap happens to be licensed then? Demirdache maintains that there is no option other than to propose that the RP, by virtue of being an operator, undergoes LF movement leaving a trace which licenses the parasitic gap in (4). In Demirdache (1997: p.206)'s words: " (w)hat, then, is the relative pronoun whose movement licenses the parasitic gap? It must be the RP itself".

An important premise in Demirdache's analysis is the assumption that "the distribution of gaps and RPs parallels the distribution of fronted *wh*-phrases and *wh*-in-situ" (Demirdache 1997: p.199). At this point, I digress a bit to discuss *wh*-in-situ since this is crucial to her proposal. As is well-known, it is standardly assumed in the generative literature that constituent questions are

<sup>5</sup>According to Demirdache (1997: p.206), the gap in (4) "has the status of a parasitic gap". Hence, it is cannot be taken as a trace "created by S-structure movement of a null operator since it occurs within a subject island".

formed by moving the interrogative phrase to the specifier of C, leaving a trace behind as shown in (5).

- (5) What<sub>i</sub> did you eat t<sub>i</sub> ?

The *wh*-word 'what' in (5) is externally merged in the complement position of the VP and then moves upward to land in the C-domain to check strong features pertaining to question formation (i.e. the Q feature in C). As far back as the early eighties, it is noticed that *wh*-movement is not uniform but comes in two flavors: overt and covert (Huang 1982; Pesetsky 1987). While *wh*-movement in overt-type languages, as in English, is characterized by the fact that the *wh*-phrase moves overtly, this is not the case for the covert types, as in Chinese, where the *wh*-phrase appears in situ. The example in (5) features overt *wh*-movement and the example in (6) covert *wh*-movement in Chinese.

- (6) a. ni xihuan shei?  
           you like     who  
           'Who do you like?'  
       b. LF: [shei [ni xihuan e ]] (Huang 1982: p.370)

The difference between the two types, then, boils down to the level at which movement applies: while covert *wh*-movement applies at LF without any phonetic realization at the surface form, overt *wh*-movement applies at the surface form with audible realization. Both types of *wh*-movement features an operator (i.e. *wh*-phrase), which binds a trace.

Turning back to Demirdache's proposal, LF movement of *wh*-phrases plays a substantial role. In particular, she argues that CLLD I is indeed derived by LF A'-movement of RP, which behaves as a vacuous *wh*-operator at surface structure. Its function is merely resumptive, which means that its reference is fixed by its antecedent. Further, like other operators (i.e. *wh*-phrase, focus operators etc.), the clitic leaves a trace when undergoing movement. To be concrete, consider the minimal pair in (7) featuring the Hebrew left dislocation, due to (Doron 1982) and English topicalization.

- (7) a. Every man, Rina thinks about.  
       b. kol gever, rina xoševet 'alav  
           every man Rina thinks about-him  
           '\*Every man, Rina thinks about him'

Under Demirdache's proposal, both sentences in (7) are derived by movement: while the English topicalization depicted in (8a) is derived by involving move-

ment of a null operator<sup>6</sup>, after Chomsky (1977) a.o., the Hebrew left dislocation behaves in a parallel fashion (8b), where it is derived by a covert movement of a pronominal operator.

- (8) a. LF: [<sub>CP</sub> every man<sub>i</sub>] [<sub>C'</sub>  $\emptyset_i$ ] [<sub>IP</sub> Rina thinks about t<sub>i</sub>]  
 b. LF: [<sub>CP</sub> every man] [<sub>C'</sub> RP<sub>i</sub>] [<sub>IP</sub> Rina thinks about t<sub>i</sub>]

In closing, Demirdache views RPs partaking in CLLD I articulations as an in-situ counterpart of a null operator. Just like other operators, RPs undergo LF movement leaving a trace in A-position. According to her, this analysis nicely accounts for the otherwise unexpected behavior of RPs, which can license parasitic gaps and reconcile movement effects with insensitivity to well established conditions on locality such as CSC and ATB.

#### 4.2.1.1 Discussion

To the best of my knowledge, Demirdache (1991, 1997) is the first account of CLLD I articulation, which assumes that movement of RPs is involved: she analyzes co-occurring RPs, which are typically employed in CLLD contexts, as operators in-situ undergoing covert movement at LF. However, attractive as it may seem, this account faces some crucial problems. First comes the theoretical concern. In particular, null operators are highly suspicious creatures for a theory which aspires to limit itself to postulates bearing virtual conceptual necessity. One of the desiderata of the Minimalist Program is to assume only "bare essentials" for constructing an economy-driven theory of grammar. As it stands, it is my contention that 'RPs as null operators' is hardly justified along the lines of Occam's razor, which aims to dispense with spurious assumptions/ primitives falling short of parsimony and simplicity. See Chomsky (1995) & Grohmann (2000, 2003) for discussion on simplicity in theory-construction, and Hornstein (2001) for discussion on how 'inclusiveness' condition in the minimalist thinking bans introducing elements lacking in conceptual necessity.<sup>7</sup> Thus, pending further research proving that enrichment of UG with null elements are theoretically needed, avoiding such constructs is a *priori*

<sup>6</sup>To be more precise, this is the starting point in Demirdache's analysis, where she discusses in detail the controversy on the derivation of topicalization, and whether this configuration involves null-operator movement or movement of the topicalized element itself. In fact, she argues for the latter position for reasons which need not to concern us here. For a detailed discussion, the reader is referred to Demirdache (1997: sec.2.8).

<sup>7</sup>The Inclusiveness Condition is a theory-internal notion proposed by Chomsky (1995: p.225) to ban introducing elements not present already in the Numeration.

desirable. See [Ott \(2015\)](#); [López \(2009\)](#) in a different context, though.<sup>8</sup>

Empirically speaking, there are some points worthy of highlighting. First, it is unclear what is the nature of the trace left after RPs undergo movement. Consider again the LF representation for the sentence in (8b), where one cannot miss the fact that the trace, which is in A-position, is in fact bound by two operators in the C-domain, on the assumption that clitics are operators according to [Demirdache](#).<sup>9</sup> Indeed, this state of affairs runs counter to the standard assumption on traces, according to which there is a one-to-one correspondence between traces and operators. According to one of the most celebrated definitions of operator-trace (variable) relation, there is a bijective correspondence between variables (traces) and operators, that is, each operator must A-bar bind one variable, and each variable must be A-bar bound by one operator ([Koopman and Sportiche 1983](#); [Alexopoulou 1999](#)). It may be objected that this working definition of variables (traces) has been challenged by the fact that there are well established phenomena which prove to be problematic for the Bijection principle. Parasitic gaps are a case in point as shown in (9), where the operator can bind two variables ([Safir 1984](#): p.609).

(9) [Which report]<sub>i</sub> [did you [file t<sub>i</sub>] [without reading t<sub>i</sub>]]?

Fair enough, but [Demirdache](#)'s approach proposes, implicitly though, that the trace can be bound by *two operators* not the other way round. As it stands, this is not how operator chains typically work. For an operator chain to be computed with felicity, a single operator has to evaluate a range of values which get assigned to a single variable (trace). Crucially, the computation of meaning requires reference to evaluations at different values borne by the variable. The onus is then on [Demirdache](#) to explain how the values of a single trace can be evaluated relative to two operators?

The impossibility of linking two operators to a single trace has been noted for example by [Taraldsen \(1986: 150-151\)](#) in his analysis of 'som', the Norwe-

---

<sup>8</sup>As is well-known, Occam's razor works on an 'all else being equal' basis. In chapter 5, I will show that all data for which null operators have been invoked in the analysis of CLLD I can be explained equally well without them.

<sup>9</sup>As noted by [Anagnostopoulou \(1994: p.146\)](#), [Demirdache](#) is not explicit enough about the structural status of resumptive clitics. In particular, she assumes that they are different from maximal projections ([Demirdache 1991: p.199](#)), but on the other hand, she maintains that they are adjoined to I' and V', and they undergo XP movement at LF; both of these properties are symptomatic of XPs. Importantly, on her assumption that CLLD involves movement of a pronominal operator (RPs), this suggests that we are dealing with an instance of XP movement, reaffirming the conclusion that the trace in (8b) is bound by two XPs, which exhibit quantificational properties.

gian equivalent of English '*that*' occurring in relative clauses and embedded interrogatives. In particular, '*som*' exhibits a subject/object asymmetry: while it is obligatory when the *wh*-phrase is a subject as in (10), it is impossible to be associated with a *wh*-phrase in a non-subject position as in (11).

- (10) a. vi vet hvem \*(som) snakker med Marit  
 we know who that talks with Mary  
 'we know who is talking with Mary'  
 b. LF:...[hvem<sub>i</sub> [CP som<sub>i</sub> [IP e<sub>i</sub> snakker med Marit]]

- (11) a. vi vet hvem (\*som) Marit snakker med  
 we know who (\*that) Mary talks with  
 'we know who that Mary talks with'  
 b. LF:...[hvem<sub>i</sub> [CP \*som<sub>i</sub> [IP Marit snakker med e<sub>i</sub>]]

Taraldsen (1986: p.151-152)

The sentence in (10) features the 'anti-*that*-trace effect', which requires the presence of a complementizer when the subject undergoes movement, in contrast to English-type languages which show 'that-trace effects'.<sup>10</sup> Crucially, what is relevant to the ongoing discussion is that the trace in (10), which appears in A-position, is bound by apparently two operators, which appear in A-bar position ; *hvem* and *som*.<sup>11</sup> This is rather surprising given the widely held assumption that a trace (variable) must be bound exclusively by a unique operator, otherwise we would run into a case of vacuous quantification. Notwithstanding, the vacuous quantification would not ensue in (10) and hence the sentence is grammatical. One choice to entertain is to assume that both '*hvem*' and '*som*' are operators binding the same variable, but this choice is rejected by Taraldsen as "fairly implausible". The optimal solution for Taraldsen, thus, is to hypothesize that one of the two elements binding the trace is NOT an operator. Following the long tradition on quantificational structures, which assumes that *wh*-phrases are operators, Taraldsen takes '*som*' to be an expletive not op-

<sup>10</sup>*That-trace effect* refers to a configuration where the subject cannot be extracted when it follows the complementizer 'that', as the contrast between (a) and (b) shows:

- a. who do you think would play?  
 b. \*who do you think that would play?

<sup>11</sup>The question which may arise: why does the complementizer *som* act as an operator? According to Taraldsen (1986: 151-152), *som* only "co-occurs with a *wh*-phrase related to the subject position in interrogatives and free relatives". Most importantly, *hvem* 'how' and *som* 'that' bind the same trace and occupy  $\bar{A}$ -positions, a symptomatic behaviour of operators.

erator and thereby the grammaticality of (10) is expected. Going back again to [Demirdache](#), the LF representation of the Hebrew left dislocation depicted in (8b) is puzzling, for it is unclear how the grammaticality of the sentence obtains without giving rise to vacuous quantification.<sup>12</sup> According to [Demirdache](#), both the QP and the RP in (8b) are operators, but this is hardly accepted since (i) QPs cannot be equated in any way with pronominals by virtue of quantificational force, and (ii) we would run into vacuous quantification given the fact that one of the operators under discussion will get stranded in the absence of a corresponding variable. An alternative analysis, which I maintain, is to simply assume that the pronominal is not an operator but an element endowed by non-quantificational nominal features.

It should be noted, nonetheless, that [Demirdache \(1991: p.43\)](#) argues that “whenever we find +*wh*-operator cooccurring with resumptives in questions, then either the pronoun is not a resumptive pronoun but the spell out of a trace created by S-structure movement, or (2) the +*wh* operator is not in Spec-CP”. Two points are in order. First, that operators can be linked to resumptive pronouns is attested cross-linguistically under semantic conditions pertaining to (D)iscourse linking ([Cinque 1990](#); [Iatridou 1995](#); [Dobrovie-Sorin 1990](#)). Second, it seems that [Demirdache](#) implicitly acknowledges that the cooccurrence of two operators binding a single trace is impossible and thereby an alternative derivational analysis must be pursued. Interestingly, this observation is not replicated in [\(1997\)](#), where she reports an example featuring Left Dislocation in Hebrew (cf. ex.8b ), reaffirming that Left Dislocation, to the exclusion of Topicalization, involves movement of a pronominal pronoun (i.e. RP). At any rate, since [Demirdache](#) is not explicit enough about this crucial issue, it is highly difficult to accept her proposal that RPs in a CLLD I articulation are analyzed as operators in-situ.

Recall that [Demirdache](#) takes *wh*-in-situ in languages like Chinese as a starting point, but this is problematic, for her account lacks consistency. First, under [Demirdache](#)’s account it is unclear why RPs should only be able to undergo LF movement and not overt movement, an operation which is attested in *wh*-in-situ languages. According to [Yuan and Dugarova \(2012: p.534\)](#), despite the fact that the *wh*-word stays in situ in Chinese *wh*-questions as illustrated in (12a), it

---

<sup>12</sup>[Salzmann \(2006: p.302\)](#) claims, based on the Hebrew data cited in [Demirdache \(1997: p.195\)](#), that the resumptive in Hebrew “can be fronted successive-cyclically so that it really behaves like an operator”. Still, what remains to be explained is to what extent that the co-occurrence of two binding operators in a clause is possible, without violating the ban on vacuous quantification.



still can undergo overt movement via topicalization as depicted in (12b).<sup>13</sup>

- (12) a. Ni zai chi shenme cai  
you PROG eat what dish  
'what dish(es) are you eating?  
b. [shenme<sub>i</sub> cai ni meiyou chi t<sub>i</sub>?]  
what dish(es) you did not eat  
'what dish(es) did you not eat?

As can be seen in (12b), *shenme cai* 'what dish' is externally merged as a complement of the verb *chi* 'eat' and then undergoes overt movement to the C-domain as a sentence topic. Further, the assumption that LF movement can "cross any (and many) *wh*-islands" (Demirdache 1991: p.202) is not consistent with the literature on *wh*-in-situ<sup>14</sup>. That LF movement is subject to island constraints is robust cross-linguistically as the following examples show. All examples below, featuring Complex NP Constraint, are cited in Murphy (2017).

- (13) \*Ni zui xihuan weishenme mai shu de ren?  
You must like why buy book DE person  
'For which reason x, do you like the person who bought books for x?'  
Chinese (Huang et al. 2009)
- (14) \*Minswu-ka Senhi-ka way ssu-n chayk-ul ilkess-ni?  
Minswu-NOM Senhi-NOM why write-REL book-ACC read-Q  
'What is the reason x such that Minswu read the book that Senhi wrote for x?'  
Korean (Shin 2005)
- (15) \*Taro-ga naze sore-o te-ni ireta koto-o sonnani okotteiru-no?  
Taro-NOM why it-ACC obtained fact -ACC much angry-Q  
'For which reason x, are you so angry about the fact that Taro obtained it for x?'  
Japanese (Lasnik and Saito 1984)

All of these examples point to the fact that LF-movement is indeed constrained by island constraints<sup>15</sup> contrary to Demirdache's claim that LF-movement voids

<sup>13</sup>It should be noted that pronoun topicalization is a possible option in Hebrew (Borer 1984).

<sup>14</sup>One may object that Demirdache's point is that LF-movement is insensitive to weak islands (Reinhart 1991). Unfortunately, this is not accurate either as it is argued by López (2009: 222-223) that CLLD I is sensitive to weak islands as well.

<sup>15</sup>It should be noted that this is only part of a larger pattern, since all of these languages permit *wh*-arguments (i.e. what) inside CNPC islands, contrary to the *wh*-adjuncts (i.e. why) reported in the main text. Since this is a field of inquiry on its own, I will not pursue it here any further. My ultimate point, thus, is to show that LF-movement can be constrained by islands. For an analysis for the observed asymmetry between extraction of arguments and adjuncts in *wh*-in-situ languages, see Murphy (2017).



islandhood.

An underlying premise in [Demirdache](#)'s proposal is that parasitic gaps provide a strong argument for the assumption that RPs, by virtue of being operators in-situ, undergo covert movement at LF. But, this is problematic, indeed, for two reasons. First, it is well known that PGs licensing under resumption is not robust cross-linguistically: there are languages where PGs are not licensed under resumption ([Tellier 1989](#)). Note that [Demirdache](#) bases her analysis of licensing PGs under resumption on Hebrew data. It remains to be seen, however, how her proposal fits in with the ban on licensing PGs under resumption in Hebrew as argued by ([Shlonsky 1992: 462-463](#)); see also [Salzmann \(2006, 2017\)](#). According to [Bolotin \(1997\)](#), Standard Arabic behaves like Hebrew in that it does not license PGs under resumption. As the minimal pair in (16) shows, the contrast between (16a) and (16b) can be explained by assuming that PGs cannot co-occur with resumptives in Arabic: the sentence (16a) is ungrammatical due to the fact there is a gap which remains unlexicalized.

- (16) a. \*haða huwwa al-kitaabu allði qaratu-hu baʿada an  
this it the-book-NOM that I read-it after that  
iʃtaraytu e.  
I bought  
'This is the book that I read after buying.'
- b. haða huwwa al-kitaabu allði qaratu-hu baʿada an  
this it the-book-NOM that I read-it after that  
iʃtaraytu-hu.  
I bought it  
'This is the book that I read after buying.'

Second, it is not clear how [Demirdache](#)'s proposal could hold water given the fact that there are proposals arguing that PG licensing is possible only in the overt syntax, that is, PGs and covert movement are incompatible ([Salzmann 2006, 2017](#)). See ([Engdahl 1983; Lin 2005](#)), but see ([Nissenbaum 2000; Kim 2001](#)). Apart from the competing proposals arguing for or against the compatibility of PGs in the context of covert movement, it remains to be seen whether PGs in Hebrew, from which [Demirdache](#) draws her data, or in genetically-adjacent languages such as Arabic, can be licensed covertly. Unfortunately, [Demirdache](#) remains silent about this, which means that the picture is still incomplete to evaluate her proposal properly.

Another problem for [Demirdache](#)'s analysis is that it does ignore the semantic distinction typically made between gaps and resumption. In particular,

[Doron \(1982\)](#) notes that there are two readings underlying the distinction between gaps and resumption: specific reading (*de re*) and non-specific reading (*de dicto*). While both readings are available in the context of gaps, only specific reading (*de re*) is allowed under resumption. This is exemplified in (17).

- (17) a. Dani yimca et ha-ša<sub>i</sub> še hu mexapes<sub>i</sub>.  
 Dani will-find ACC the-woman that he seeks  
 'Dani will find the woman that he's looking for.' (*de dicto*) and (*de re*)
- b. Dani yimca et ha-iša<sub>i</sub> še hu mexapes ota<sub>i</sub>.  
 Dani will-find ACC the-woman that he seeks her  
 'Dani will find the woman that he's looking for her.' (*de re*)

[Sharvit \(1999\)](#) makes further distinctions among three interpretations with respect to gaps/resumptives dichotomy: individual reading, functional reading and pair-list reading. To be concrete, in English for instance, a question as exemplified in (18) has three possible types of answers.

(18) Which woman did every man invite?

- a. Mary [Individual answer]  
 b. His mother [Functional answer]  
 c. John invited Mary, Bill invited Sally etc. [Pair-list answer]

Of special importance here is that in Hebrew, all of three interpretations are possible with gaps. By contrast, resumptives allow only individual and functional answers.

(19) exyo iša kol gevev himin ota?  
 which woman every man invited [her]  
 'Which woman did every man invite?'

- a. 'Gila' [Individual answer]  
 b. His mother [Functional answer]  
 c. \*John invited Mary, Bill invited Sally etc. [Pair-list answer]

Crucially, these data point to an important conclusion: gaps and RPs are not two sides of the same coin as assumed by [Demirdache](#). Syntactically speaking, it seems that the prevalent view in the literature is that whenever there is a resumptive pronoun, this entails that a movement dependency is not involved ([Salzmann 2006](#): p.277). See [Chao and Sells \(1983\)](#); [Rouveret \(2002\)](#); [Adger](#)

and Ramchand (2005), but see Boeckx (2003). To the extent that this semantic and syntactic distinction is on the right track, it is then too premature to draw the conclusion that RPs pattern with gaps in that both are a direct result of syntactic movement, since this conclusion does not make accurate predictions as to the interpretive/syntactic divergence attested between them.

Demirdache's proposal further faces an undegeneration problem. First, it is unclear under this analysis how to derive CLLD I-ed elements resumed by strong pronouns and epithets. For example, Aoun and Choueiri (2000: p.9) reports an example from Lebanese Arabic, with CLLD I being resumed by an epithet.<sup>16</sup>

- (20)   ʔayya kteeb   χayy-e<sub>i</sub>       ʔaalit   Laila   ʕanno   ʕadir       ha-l-habille<sub>i</sub>  
           which book brother-my said.3SF Laila that    could.3SM this-the-idiot  
           yχalliS  
           finish.3SM  
           'Which book, my brother, Laila said that this idiot could finish?

In this example, the dXP appearing in the left periphery is related to the host clause via the intermediary of the epithet *ha-l-habille* 'this-the-idiot'. This epithet is marked thematically as having an agent  $\theta$ -role. On the basis that the dislocated phrase is internally merged (i.e. moves), it is not clear why the dXP would undergo movement from a  $\theta$ -position which is already taken by another element. Under a base-generation account, on the other hand, the dXP is externally merged in the matrix clause and hence no connection can be assumed between the dXP and its corresponding epithet. In fact, this issue has been addressed explicitly in Demirdache and Percus (2011: p.380). In particular, it is acknowledged that epithets in the context of dislocation are complex: they must consist of a pronoun plus an epithetic term. This assumption is based on the fact that in Lebanese and Jordanian Arabic, there is an overt pronoun in addition to the epithet. According to Demirdache and Percus, as long as there is a pronoun, nothing blocks LF movement. While this may not be a problem for Lebanese and Jordanian Arabic, it remains to be seen how this analysis can be applied to those languages where no overt pronominal elements at all cooccur with the epithet. See McCloskey (1990) for discussion on epithets in Irish.

Second, it is unclear as well how to account for cases in which the dXP DOES undergo reconstruction. Variable binding is a case in point, with a strict

<sup>16</sup>According to Aoun and Choueiri (2000: p.13), epithets can be used as resumptives in Lebanese Arabic (LA), but the determining factor that allows this is the presence of pronominal information in the epithet. In their parlance, "(e)pithet phrases in LA can be used as resumptive elements only when they occur with the pronominal morpheme *ha-* 'this'".

c-command relation being taken as a condition on the grammaticality of this configuration (i.e. operators must c-command their variables ([Higginbotham 1980](#); [Reinhart 1983](#)). By way of illustration, consider the example in (21), taken from [Grohmann \(2003: p.143\)](#).

- (21) Seinen besten Freund, den sollte jeder gut behandeln  
 his-ACC best friend RP.ACC should everyone well treat.'  
 'his best friend, everyone should treat well''

The sentence in (21) features Contrastive Left Dislocation, a CLLD I-analogous construction attested in Germanic languages. At first blush, the sentence is expected to be ungrammatical since the pronoun 'his' is embedded within the dXP and hence is not c-commanded by the QP 'everyone'; notwithstanding, the sentence is grammatical. Barring stipulative assumptions, the natural explanation for the grammaticality of (21) is to assume that the dXP along with the possessive pronoun is reconstructed to a position where the QP can c-command the possessive pronoun. Under [Demirdache's](#) analysis, thus, cases of the like depicted in (21) would be indeed a pebble in the shoe, since for the strict c-command requirement to be satisfied, the dXP rather than the RP must undergo movement under reconstruction.

This completes my discussion of [Demirdache's](#) proposal. Before moving on, I conclude by saying that [Demirdache's](#) analysis is indeed attractive since it proposes a novel analysis, somewhat unorthodox, to derive CLLD I, where the linking between the dXP and its associated clitic is mediated by LF-movement of the latter. Given serious drawbacks alluded to earlier, however, [Demirdache's](#) proposal is rejected pending an analysis of how these theoretical and empirical glitches can be tackled.<sup>17</sup>

#### 4.2.2 Cinque (1990): CLLD I is derived by Binding Chain

In the realm of monoclausal approaches to dislocation, it would be terribly embarrassing to ignore the work of [Cinque \(1990\)](#): the most cited work to date on CLLD I in the generative literature. As we show chapter 2, [Cinque](#) embarks on a project whose aim is to analyze 'topic constructions' ([Cinque 1977, 1990, 1983](#),

<sup>17</sup>[Anagnostopoulou \(1997\)](#) maintains that the dXP is base-generated where it appears, and it is the clitic which undergoes covert movement. This analysis is pretty much in line with [Demirdache's](#) proposal. The only argument that she presents in favour of this analysis is based on [Reinhart \(1991\)](#)'s proposal that LF movement is insensitive to islands, but this is not accurate as shown by [López \(2009\)](#). For more discussion, the reader is referred to [López \(2009: p.231f\)](#).

1990, 1997; Cinque and Krapova 2008). Before going into the syntactic details of his last take on CLLD I, a crucial comment must be introduced. Cinque's interest in CLLD I can be traced back to (1977), where the dependency between the dXP and the clitic is argued to follow from syntactic movement (i.e. the dXP is originally merged in the thematic domain within the VP and then raised upward to a position external to TP, arguably in the C-domain). This position, though, is challenged by Cinque himself in his seminal monograph on 'Types of  $\bar{A}$ -Dependencies' (Cinque 1990: ch.2). In particular, he acknowledges that CLLD I shows properties which favor a base-generation/movement analysis simultaneously (i.e. CLLD I is sensitive to strong islands; nonetheless it does not equally pattern with other properties of *wh*-movement). Let us zoom in on his proposal in more detail to see how he approaches such a paradox.

At the outset, he argues that there appear to be two options which suggest themselves for a movement analysis of CLLD I: (i) to assume that the clitic is the overt spell out of *wh*-movement, or (ii) to take CLLD I as an instance of Clitic Doubling (CD).<sup>18</sup> According to Cinque, both options are not without shortcomings. Turning to the first option: if CLLD I is indeed a *wh*-movement configuration, it must show the properties typical of *wh*-movement such as licensing Parasitic Gaps (PGs), and giving rise to Subjacency effects. However, clitics in Italian do not license parasitic gaps as in (22).

- (22) \*Gianni, l'ho cercato per mesi, senza trovare e  
Gianni, him have looked for for months without finding

Another argument militating against a *wh*-movement analysis of CLLD I is that topic constructions in Italian are not subject to Subjacency conditions as shown in (23).

- (23) Loro, il libro, credo che a Carlo sia sicuro che non glielo  
Them, the book I think that to Carlo it-is certain that they will  
daranno mai  
never give it to-him

According to Cinque (1990: p.63-64), three different constituents in (23) are left-dislocated from the lower clause. In his analysis of (23), Cinque assumes that there are topic positions, which are adjoined to the left of CP; see the representation depicted in Cinque (1990: p.65). *Loro* and *il libro* are thought to be adjoined to the left of the matrix CP, while *a Carlo* is adjoined to the left of the embedded CP (Alexopoulou 1999: p.115). In case *il libro* undergoes movement,

<sup>18</sup>I will return in section 5.4.1.2 to the proposal aspiring to equate CLLD I with Clitic Doubling.

it should cross two CPs along its path, in violation of subadjacency, contrary to fact.<sup>19</sup> Under the assumption that the dXP is externally merged, however, the grammaticality of (23) falls out naturally by assuming that the Subadjacency effects would not ensue since there is no movement to begin with.

Until this point, one would conclude that CLLD I should be analyzed as involving base-generation, but the picture is not as straightforward as it appears. More specifically, Cinque shows that the relation between the dXP and the clitic cannot be established across a strong island. On the assumption that sensitivity to islands is a hallmark of movement, CLLD I appears to favor a movement-based account. This is illustrated in (24), where the clitic cannot be inside an adjunct island.

- (24) \* A casa, lo abbiamo incontrato prima che ci andasse.  
           ‘home, we met him                      before that he there went’.

Further, the dXP displays connectivity effects in that it is interpreted as if it were in the IP-internal position. Consider the example in (25).

- (25) se stessa, Maria non ci pensa.  
           ‘herself, Maria not-there-thinks’

In (25), the reflexive *se stessa* (herself) appears in a position where it is not apparently bound by its antecedent ‘*Maria*’. But the sentence is still grammatical. To account for the grammaticality (25), it is assumed that the reflexive is reconstructed (i.e. moved back) to a position where it is originally merged and hence the binding relation obtains. As it stands, this state of affairs shows that CLLD I is not derivationally uniform since it satisfies diagnostics both for movement and for base-generation. Cinque’s treatment to this paradox, or ‘Cinque’s paradox’ after Iatridou (1995), is to propose a dependency mechanism, termed Binding Chain, to reconcile movement with base-generation observed in the behavior of CLLD I in Italian. In particular, islands are a condition on representation rather than movement. In Cinque’s (1990: xv) parlance, “the conditions on long *wh*-movement are not conditions on movement per se, but are well-formedness conditions on chains, whether these are created by movement (as in ordinary *wh*-constructions) or base-generated (as in clitic left dislocation)”.

In closing, CLLD I is argued to be not derived by movement since this

---

<sup>19</sup>According to the bounding-theoretic assumption, *wh*-movement is a local process, crossing two bounding nodes being barred. Bounding nodes are taken to be NP and IP in English (Haegeman 1994: p.412). As for Italian, bounding nodes are argued to be parametrized such that NP and CP are considered as bounding nodes (Rizzi 1982).

configuration does not show the properties characteristic of *wh*-movement : (i) leaving a gap after movement, (ii) licensing parasitic gaps and (iii) sensitivity to Subjacency condition. Nonetheless, CLLD I is sensitive to strong islands (i.e. symptomatic of movement). To resolve this paradox, Cinque proposes that CLLD I is regulated by Binding Chain, whose main aim is to "mimic the effects of movement in the absence thereof" (Ott 2015: p.231).

#### 4.2.2.1 Discussion

At first sight, it appears that Cinque provides a cogent answer to the paradoxical status of CLLD I. Unfortunately, however, this comes at the cost of proposing stipulative and spurious constructs, which are suspect from a minimalist perspective. Hornstein (2001: p.7) maintains that minimalist thinking centers around the assumption that derivations must be economical in that they have to contain only necessary formatives in their numerations. A corollary of this stance is to keep stipulative constructs to a minimum. Among these constructs are chains, PRO, null operator, traces and the like. Unless one has strong reason to resort to these elements, it is theoretically preferable to dispense with them altogether. In the same vein, López (2009: p.214) notes that Cinque's proposal adds unnecessary complication to the theory in that two distinct chains are postulated, one corresponds to movement and the other to base-generation. Even worse, while movement and base-generation are analytical options with long traditions and distinct properties, Cinque chooses instead to resort to an unmotivated mechanism, which is rooted in binding relations, to account for the Janus-faced behavior of CLLD I in Italian.

A clear instance of stipulation and unmotivated complexity in Cinque's treatment can be found in his analysis of how the relation between the dXP and the clitic is mediated. To start with, he proposes that the sentence in (26) is best analyzed as having the derivation depicted in (27).

- (26) A Giorgio, Piero non gli ha scritto  
 A Giorgio, Piero not to-him has written  
 'Piero has not written to Giorgio'

- (27) [<sub>S</sub> [<sub>TOP</sub> [ A Giorgio]<sub>i</sub>] [<sub>S</sub> Piero non [<sub>PP</sub> gli]<sub>i</sub> ha scritto [<sub>PP</sub> ]<sub>i</sub> ]]

To account for the relation between the dXP and the clitic in purely base-generation terms, he writes:

The categorially identical sentence internal phrase is an empty phrase



(which may itself be bound by a clitic pronoun). Such [subscripts] coindexing has the effect of building up a 'chain' of like categories where the 'chain' can be conceived of as the dilation of a single category. In other words, the chain counts as one argument position in that it contains a single contentive element (the content of the category in TOP) even though such content is 'linked' to two categorial positions: the one in TOP position and the sentence internal empty phrase.

(...) [S]o that the full 'chain' consisting of the lexical phrase in TOP, the clitic pronoun and the empty sentence internal phrase still counts as a single argument position spread in three categories.

(Cinque 1997: p.105)

A quick trawl of this lengthy quote reveals that the grammar within the framework of Cinque is complicated in non-trivial ways. The first concern is the validity of proposing elements with little, or to be blunt, no content such as indices, which are employed for the sake of coindexing (Villalba 2000). As far back as Chomsky (1995: p.199, fn.53), indices are highly questionable creatures on minimalist grounds since they are "basically the expression of a relationship, not entities in their own right", and hence "(t)hey should be *replaceable* without loss by a structural account of the relation they annotate." (italics mine). Second, it is standardly assumed that an A'-dependency, which can be recast in chain formation, operates on two elements sharing similar properties, but unorthodoxly, Cinque proposes three occurrences of the same element (i.e. *To Giorgio*). This strikes me as surprising since this is questionable in the context of A'-dependency computation unless more legwork must be undertaken to deal with syntax-phonology mapping.<sup>20</sup> Under the copy-theoretic assumptions, the situation gets worse. According to Chomsky (1995, 2000), copies arise only by movement (internal merge); lexical items derived by base-generation (i.e. external merge) are stipulated to be coded via indexation. As it stands, this state of affairs would violate the inclusiveness condition. The onus then is on Cinque to explain: (i) how the grammar of natural languages distinguishes between real copies and empty phrases, which are re-

<sup>20</sup>Barbiers et al. (2010) for example discuss the behavior of syntactic-doubling in *wh*-dependencies documented in dialects of Dutch, where it is noted that more than one member of the same chain can be spelt out. To make sure that a *felicitous* syntax-phonology mapping obtains, they propose a generalization according to which a higher member of the chain is not more specified than a lower member of the chain, and then they flesh out an analysis accordingly.



lated tokens of the topic as in (27); and (ii) how can the inclusiveness condition be preserved under the base-generation analysis? Finally, it is unclear how case assignment and  $\theta$ -roles are satisfied under this approach. In other words, how does the dXP, which happens to appear in a non-local position with any  $\theta$ /case-assigning predicate, ends up sharing the same  $\theta$ -role in addition to the morphological case with the clitic?<sup>21</sup> Barring unmotivated mechanisms, it is quite unlikely to be accounted for in a way which is consistent with *simplicity* and *naturalness* (Ott 2015). Interestingly, Cinque remains agnostic about the exact determination of how Binding Chain works. A formal characterization of Binding Chain (28), though, is proposed by Frey (2004: p.223), citing Cecchetto and Chierchia (1999); see also Baker (1996: p.109) for a similar, though not identical, characterization of DPs in Polysynthetic languages. For criticism of Baker's proposal, see Bruening (2001) and Legate (2002).

- (28) A CHAIN  $\langle \alpha_1, \dots, \alpha_n \rangle$  is a sequence of nodes sharing the same  $\theta$ -role such that for any  $i$ ,  $1 \leq i < n$ ,  $\alpha_i$  c-commands and is coindexed with  $\alpha_{i+1}$

According to this characterization, identity parallelism (i.e. case and  $\theta$ -matching for example) underlying the relation between the dXP and its associated clitic is taken to be property of chains, and hence it is orthogonal to the movement-construal story. However, adopting this characterization to analyze CLLD I poses an undergeneration problem. This is so due to the fact that the dXPs, from a cross-linguistic perspective, are not limited to  $\theta$ -marked elements (Ott 2015). Furthermore, as noted by Legate (2002: p.83), the aim of this characterization is to turn "a base-generation structure into a movement structure", but at the expense of blurring the wildly-held distinction between movement and base-generation, rendering Binding Chain an *unfalsifiable* proposal.<sup>22</sup>

Another problem concerns the ontology of Binding Chain itself. As Villalba (2000: p.256) notes, the proposed Binding Chain is not even akin to other standard binding relations. In particular, while genuine binding relations are not sensitive to strong islands (29), CLLD I is (cf. ex. 24).

<sup>21</sup>Recall that according to Cinque (1983, 1997, 1990), the dXP must share the same  $\theta$ -role and morphological case as the clitic.

<sup>22</sup>The term 'falsification' is intimately correlated with Carl Popper, one of the 20th century influential philosophers of science. According to Popper, the best hypotheses, analyses etc. are refutable, because they made testable claims. Crucially, only firm hypotheses/analyses which survived these tests are rendered well-supported. For further discussion of this substantial concept, the reader is referred to Carl Popper's epoch-making contribution (1959) *The Logic of Scientific Discovery*.

- (29) En Pere<sub>i</sub> va anar amb el noi que el<sub>i</sub> va ajudar.  
 'Pere went with the boy that helped him.'  
 Catalan (Villalba 2000: p.256)

Interestingly, the same sentence can be replicated in Arabic with a grammatical outcome.

- (30) Ali-an<sub>i</sub> ḏahaba maʿa almudarisā allḏi saʿḏau-hu<sub>i</sub>  
 Ali-ACC went-3SP with th-teacher-GEN who helped him  
 'Ali went with the teacher who helped him.'

As can be seen in (29) and (30), the proper names can be related to co-occurring elements across a strong island (NP Complex Constraint). It follows thus that binding relations are immune to locality conditions, which suggests that Binding Chain as proposed by Cinque (1990) cannot be a binding relation. The onus is then on Cinque to prove that his proposal ties in neatly with other well-established binding mechanisms in terms of islands sensitivity.

One piece of evidence advanced by Cinque to reject a *wh*-movement analysis of CLLD I is that CLLD I in Italian does not license parasitic gaps (PGs).<sup>23</sup> But this is problematic for various reasons. To start with, it is not a primitive that there is a close relation between PGs and syntactic movement. DP movement is a case in point, where PGs are not licensed in passive constructions (31).

- (31) John<sub>i</sub> was killed t<sub>i</sub> by a tree falling on \*pg/him. (Engdahl 1983: p.13)

Under the standard assumption that passives undergo DP movement (Carnie 2011), the impossibility of PGs is unexpected if one takes PGs as constructions derived by movement. These data, however, fall out naturally by assuming that the relation between PGs and 'mere movement' is just illusory.<sup>24</sup>

<sup>23</sup>Escobar (1995: p.139) reports an example from Spanish, marginal though, showing that PGs are possible in a CLLD I articulation.

- a. ?A Juan lo he buscado durante meses, sin encontrar.  
 ACC Juan ACC-CL (I) have looked for months, without finding e

Escobar concludes that "either Italian is quite different from Spanish, or the criterion is unsatisfactory." In fact, given the inadequacy of this criterion to account for observations alluded to earlier, I would rather go for the second option in Escobar's conclusion that this criterion is unsatisfactory, and submit therefore that PGs are an uninformative test with respect to the (non-) movement status of CLLD I. More on this below.

<sup>24</sup>I am aware that PGs are typically licensed via A'-movement, not A-movement. This is due typically to the intrinsically quantificational nature of PGs, which feature a *wh*-phrase coindexing two empty operators at the same time Chomsky (1982). The first empty category corresponds to a *wh*-trace, while the other behaves as a variable (a). Crucially, PG can only be licensed by a variable which does not c-command it (b).

Perhaps the strongest argument against PGs-cum-movement comes from foci operators and *wh*-phrases which are typically argued to undergo A'-movement (Rizzi 1997). Specifically, López (2009: p.225) reports examples featuring Focus Fronting (32a) and *wh*-phrases (32b) in Spanish, arguing that they are not compatible with PGs.

- (32) a. \*A JUAN he buscado durante meses sin encontrar  
           A Juan he looked for for months without encounter  
       b. \*A quién has buscado durante meses sin encontrar?  
           who has looked for for months without encounter?

If PGs are a reliable diagnostic for derivations generated by A'-movement, we would predict that the sentences in (32a) and (32b) should be grammatical given that they are standardly A' movement-driven constructions. This prediction, however, is not borne out in Spanish, lending further support to the assumption that relationship between PGs and syntactic movement is not a kind of cause-consequence relation. For the sake of argument, if one assumes, following Cinque, that clitics in CLLD I do not license PGs, how we can accommodate then confounding data which shows otherwise? In particular, Samek-Lodovici (2015: p.124) reports an example shown in (33), where CLLD I can license PGs in Italian when the adjunct containing the gap has narrow focus.

- (33) Il tuo cane, l' ha cercato per mesi senza mai trovare *pg*  
       The your dog, it has sought for months without ever to find,  
       MARIA, (non la polizia)!  
       Maria (not the police)  
       'Your dog, MARY sought it for months without ever finding it (not the police)!'

- 
- a. What did you file  $t_1$  before you recognized  $e_1$ .  
 b. \*Who  $t_1$  met you before you recognized  $e_1$ ?

Since the trace left after DP-movement cannot be taken as a variable in (31), it follows then that A-movement configurations are not licit in the context of PGs for independent reasons having to do with the impossible occurrence of variables. This connects to a broader issue, examined in Dobrovie-Sorin (1990), that preclusion of PGs under resumption is correlated with the fact that PGs are licensed by a variable; symptomatic of quantificational structures, and this is not the case for the example in (31). Interestingly, CLLD I can receive a similar analysis in that PGs are not licit in CLLD I given the non-quantificational nature of CLLD I-ed elements, as argued at length in Cinque (1995). Hence, licensing PGs configurations derived by A'/A-movement depends on the quantificational nature of configuration under discussion. What I would like to stress, thus, is that PGs licensing is orthogonal to movement, and should be relegated to the ability of a given head of a movement chain to behave like an operator, abstracting from A'/A dichotomy. It should be noted that López (2009) and Kechagias (2011) entertains the possibility that the dislocated constituent involves A-movement. Space reasons preclude me to attempt an appropriate treatment for their contributions, but the reader is referred to Fernández-Sánchez (2017, 2020) for a critique of López (2009).

Another piece of evidence proposed to argue against a *wh*-movement analysis of CLLD I is the assumption that it is possible for a number of CLLD I-ed elements to be stacked in one articulation. If movement is involved in the derivation of CLLD I, we would predict that Subjacency would be violated. This prediction, though, is not borne out since CLLD I-ed elements as shown in (23) can be stacked without giving rise to ungrammaticality. Cinque concludes thus that this is a direct consequence of the base-generated status of CLLD I. In particular, no minimality effects are expected to arise because there is no movement to begin with. The problem with this line of reasoning, though, is its limited cross-linguistic coverage. A case in point is that the iteration of CLLD I in MSA is severely deviant. This is shown in (34).

- (34) a. Hind-an<sub>i</sub>, Ali-un   ʔʔta-ha<sub>i</sub>    al-kitab-a  
           Hind-ACC, Ali-NOM give.3SG-her the-book.ACC  
           ‘Ali gave Hind the book’  
       b. \*Hind-an<sub>i</sub>, al-kitab-a<sub>k</sub>    Ali-un    ʔʔta-ha<sub>i</sub>    ajay-hu<sub>k</sub>  
           Hind-ACC the-book-ACC Ali-NOM give.3SG-her ACC-it  
           ‘Ali gave Hind the book’

The ungrammaticality of (34) is easily accounted for by assuming that there is movement involved. Specifically, the first dXP ‘*hindan*’ is related to a clitic in the lower clause crossing another dXP ‘*alkitab*’. On the assumption that movement chains are intercepted by potential intervenors (Rizzi 1990), the presence of such effects in (34b) suggests that syntactic movement is what is at stake.

#### 4.2.2.2 Iatridou (1995): Cinque’s paradox

Before concluding my discussion of Cinque’s proposal, I would like to highlight a corroborating proposal which is somewhat concurrent with Cinque’s work. Specifically, Iatridou (1995) fleshes out an analysis to back up Cinque’s conclusion, but with a fresh perspective on what she terms ‘Cinque’s paradox’. She argues that CLLD I in Modern Greek (MG) behaves like Italian in that it does not display properties characteristic of *wh*-movement (i.e. the unavailability of PGs licensing (35a) and the absence of WCO effects (35b)).

- (35) a. \*Afto to   arthro i    Maria to arhiothetise horis    na-diavasi  
           this the article the Mary it filed               without reading  
           ‘Mary filed this article without reading’  
       b. kathe pedi<sub>i</sub>       i    mitera tu<sub>i</sub> ton<sub>i</sub> agapa  
           each child-ACC the mother his it    loves  
           ‘His mother loves each child’



While Cinque takes them as constraints on chains, Iatridou relegates them to adjunction sites: islands effects arise if the dXP undergoes movement from an adjoined position to a higher one. To start with, Iatridou reports an example showing that CLLD I can appear in a long-distance dependency as in (39a), the source of which being (39b).

- (39) a. ton Kosta nomiza oti i Maria ton idhe  
           the K. (I) thought that the M. him saw  
       b. nomiza ton Kosta oti i Maria ton idhe  
           (I) thought the K. that the M. him saw.

She makes a comparison between (39a) and (39b), and concludes that the dXP is directly merged as an adjunct to the CP containing the CL (i.e. adjunction to the lower CP).<sup>25</sup> In cases of long-distance CLLD I as in (39a), the dXP can undergo movement to a higher clause if it does not cross an island as in (39a). As such, islands sensitivity arises in (38) because islands are taken to constrain COMP-to-COMP movement López (2009) (i.e. islands constrain the movement from the adjoined position of the lower CP to the higher CP). In her parlance:

islands constrain the relationship between the position in which *ton Kosta* is generated (as in (34) [here 39b] and the position it appears in (27) [here 39a]. This is a movement relationship. This is a movement out of an adjoined position and extraction out of such a position over an island is predicated to have the feeling of an ECP violation, as in the case of adjunct extraction out of an island, and not a subadjacency violation as when an object is extracted out of an island" (ibid:19).

To explain why CLLD I is transparent for extraction as exemplified in (36, 37), Iatridou argues that this is a property of adjunction. In particular:

(t)his is because the [Discourse-Linked]-position and all the traces that the CLLD I-ed element might leave on its way up are adjunction sites, and *adjunction does not create islands*, unlike A-bar movements through [Spec, CP], which does create islands by blocking

<sup>25</sup>It should be noted that Iatridou argues that the dXP is externally merged as a subject of predication, where the dXP is licensed by rules of predication (Chomsky 1977): the predicate is taken to be the minimal clause containing the clitic. See Barbosa (2000: p.33) and De Cat (2002: p.103).

a. [CP dXP [CP CL ...]]

'escape hatch'. This explains the superficially odd combination of properties that movement involved in long distance CLLD I has: it obeys, but does not create islands.<sup>26</sup>

Iatridou (1995: p.24, italics added)

Despite the appeal of this proposal, it does not hold, though, under empirical scrutiny. Alexopoulou (1999: p.125) for instance reports examples from MG, showing that, contrary to Iatridou's claim that islands only constrain the relation between the position in which the dXP is generated (i.e. adjoined to the clause that the clitic appears) and the position in which it appears, islands constrain adjunction to lower CP as well, that is, islands indeed constrain CLLD I. As the following examples show, the dXP is adjoined to the left of the lower CP, which should be rendered grammatical under Iatridou's analysis. But this is not the case, according to Alexopoulou, where it is argued that islands constrain adjunction to the lower clause as well.

(40) \*sinandisa tin kopela ton Kosta pu ton ide  
 met-1SG the girl-ACC the Kosta-ACC that him-CL saw.3SG  
 'I met the girl that saw Kostas.'

(41) \*apokimithike tin efimerida diabazondas tin  
 fell-asleep-3SG the newspaper-ACC reading her-CL  
 'S/he fell asleep reading the newspaper'

Recall that Iatridou maintains that CLLD I in MG is an adjunction construction because it does not create islands nor does it block access of a higher verb. Alexopoulou in turn argues against this conclusion, arguing that these properties are typical of foci constructions as well—the archetype of configurations derived by A-bar movement (42a,b). This state of affairs would entail, erroneously though, that foci constructions should receive an adjoined analysis on a par with CLLD I; an implausible parallelism.

<sup>26</sup>It remains to be seen, however, how this conclusion ties in with the well-known assumption that topics *create* islands for long-distance movement (like *wh*-movement and topicalization). Further, Iatridou does not provide data featuring the possibility of iterability of topics in MG to see whether minimality effects would arise. As the following English examples show, topics are opaque domains for extraction of *wh*-movement (a) and topicalization (b). Moreover, the iteration of topics are not allowed either (c). See Müller (1995: p.330f) for a proposal that "topicalization is not adjunction".

- a. \*What<sub>i</sub> do you think t<sub>i</sub> that [for Ben's car]<sub>j</sub> Mary will pay t<sub>i</sub> t<sub>j</sub> ?
- b. \*That man<sub>i</sub> I know t<sub>i</sub> that [this book]<sub>j</sub> Mary gave t<sub>j</sub> to t<sub>i</sub>?
- c. \*John said that [on the table]<sub>i</sub> [this book]<sub>j</sub> you put t<sub>j</sub> t<sub>i</sub>. (Müller 1995: p.330f)



- (42) a. rotisa pios nomizis ti MARIA oti tha psifize  
 asked.1SG wh.NOM think.2SG the Maria.ACC that would vote.3SG  
 'I asked who you think would vote for Maria'
- b. anarotieme ton KOSTA pios ide  
 wonder.1SG the Kosta.ACC who.NOM saw.3SG  
 'I wonder who saw Kostas.'

To wind up the discussion of Cinque's (1990) seminal work, the derivation of CLLD I by recourse only to construal is indeed undesirable treatment for a phenomenon which proves to defy a unified analysis over the years. Barring *ad hoc* assumptions, Cinque's paradox still resists a principled account, giving further support to the assumption that both derivational options (i.e. movement vs. base-generation) have still primacy over other attempts trying to derive CLLD I from one option, to the exclusion of the other.

## 4.3 CLLD I in Arabic

### 4.3.1 Ouhalla (1997): CLLD I is derived by base-generation

Ouhalla (1994a) maintains, in passing though, that the difference between Focus Fronting (43a) and CLLD I (43b) in Standard Arabic boils down to the derivational history of both constructions: while CLLD I is an External-Merge operation, Focus-Fronting constructions are derived by movement.

- (43) a. RIWWYAT-AN ?allafat Zaynab-u  
 novel-ACC wrote.3FS Zaynab-NOM  
 It was a NOVEL that Zaynab wrote
- b. (al)-riwaayat-u, ?allafat-ha Zaynab-u  
 the-novel-NOM wrote.3FS-it Zaynab-NOM  
 "(As for) the novel, Zaynab wrote it

According to Ouhalla, the CLLD I ed-phrases differ from focused counterparts (f-phrases in his account) in a number of aspects. First, CLLD-ed phrases denote old information which is familiar to the interlocutors in a given discourse. This is not the case, however, with f-phrases which refer to new information. This is evident from the claim that indefinite elements can be focused contrary to CLLD I-ed phrases (cf. the mandatory presence of the definite article is represented via parenthesis)<sup>27</sup>; but see chapter 3 for a clashing view. Second, unlike CLLD I-ed phrases, f-phrases are prosodically identified by tonic

<sup>27</sup>This is not according to the original glossing of Ouhalla, but I add it for clarification.



accent (i.e. focal stress). Third, CLLD I-ed phrases are separated from the rest of the clause by an intonational break, represented in (43b) with a comma; a state of affairs which does not hold true of f-phrases. Fourth, while CLLD I-ed phrases are linked to the host clause via a pronominal element (i.e. clitic), f-phrases are related to a gap. In addition to this, CLLD I-ed phrases as in (43b) bear the default case, which happens to be nominative in Arabic. See [Progovac \(2006\)](#); [Schütze \(2001\)](#) on the notion of default case, and see also chapter 2 for the proposal that the default case is symptomatic of CLLD II (HTLD) *contra* [Ouhalla](#)'s claim.

On the other hand, f-phrases covary with the clause-internal position they are associated with. In (43b), for example, the f-phrase is case-assigned accusative by virtue of being linked to the direct object position. On the basis of these differences, [Ouhalla](#) concludes that CLLD I-ed phrases differ from f-phrases derivationally: while the latter is a movement configuration, the former is best analyzed as being derived by base-generation. He writes:

[The] difference between LD-phrases and preposed f-phrases suggests that the latter form a chain with the clause-internal gap, subject to the usual condition on (movement) chains that they have one Case position ([Chomsky 1986](#)). In contrast, LD-phrases do not form a chain with the clause-internal pronoun, and hence the fact that a LD-phrase can have a Case different from the one associated with the clause-internal position it is related to.

#### 4.3.1.1 Discussion

As shown in chapter 2, almost all of the previous proposals fail to distinguish between two broad configurations: CLLD II and CLLD I. Crucially, [Ouhalla](#) is not an exception since he mingles CLLD II with CLLD I. I do not discuss the rationale for this distinction here, since it is already examined in some details in chapter 2. Instead, I would like to raise another issue, which is not addressed in [Ouhalla](#)'s treatment, *viz.*, Cinque's paradox. Interestingly, CLLD I in MSA presents a case in favor of this paradox. First, the dXP shares the same morphological case as the CL, pointing to the conclusion that CLLD I in MSA is derived by movement, under the assumption that "syntactic connectedness

presupposes movement” [Anagnostopoulou \(1997: p.157\)](#).<sup>28</sup>

- (44) Hind-an qablat-u-ha  
Hind-ACC meet-1SG-her.ACC  
'I meet Hind'

Further, Condition C is another piece of evidence showing that the derivation of CLLD I in MSA involves movement as the example in (45) shows, repeated from section 2.5.2.1 (ex.47a): the degradedness of (45) is ascribed to the fact the dXP is interpreted within the c-command domain of the pro, giving rise to a violation of Condition C (i.e. movement effects).

- (45) ?kitab-a ali-en<sub>i</sub> pro<sub>i</sub> qarʔ-hu<sub>i</sub> albariha  
book-ACC Ali-GEN pro read-it.ACC last night  
'He read Ali's book last night.'

On the other hand, this does not mean in any way that CLLD I in Arabic is a run-of-the mill case of movement since CLLD I in Arabic does still display symptoms of base-generation. First, under a movement approach, one would expect that the dXP is linked to a real gap not to a clitic in consonance with other *wh*-movement operations. Second, the fact that the dXP as in CLLD I typically forms an intonational phrase on its own, which is flagged here by a comma, cannot be compatible with a movement analysis : the dXP is taken to be detached prosodically from the host clause ([Frascarelli 2000, 2004](#)). Third, CLLD I in MSA neither gives rise to WCO effects nor licenses parasitic gaps as in (46) and (47). But see sections 4.4.3 and 5.3.2.2 for a deserved qualification.

- (46) Aliyan umu-hu tuhibu-hu  
Ali<sub>i</sub>-ACC his<sub>i</sub> mother loves-3SG- him<sub>i</sub>  
'Ali's mother loves him'
- (47) \*Khalid-en, abhaθu ʔnu-hu li ʔjuhoor-in doun ʔan  
Khaild-GEN look for-1SG-him.GEN for months-GEN without to  
ʔaʒida e  
find  
'Khalid , I have looked for for months without finding'

<sup>28</sup>One comment is in order: drawing on Chomsky's (1993) principle *Greedy*, [Bošković \(2007\)](#) proposes an agreement theory where the Agree relationship established between the probe (*v*) and goal (the dXP in the context of dislocation) is reversed. The basic application of this theory to the current discussion is that it can be assumed, as [Villa-García \(2015\)](#) did in his discussion of recomplementation CLLD I in Spanish, that the dXPs can check case from their base-generated position in the left periphery, and hence nullifying any relation of the sort between case-assignment and movement; though see [Boeckx \(2008\)](#) and [Preminger \(2011\)](#) for a clashing view.

On the claim that WCO and PGs are symptomatic of A'-movement chains (Richards 2014), their absence in the context of Arabic CLLD I amounts to a tentative conclusion that CLLD I in Arabic is derived by base-generation. In short, the behavior of CLLD I in MSA provides a supporting case for Cinque's paradox where both movement and base generation can co-exist as potential explanations for CLLD I.

### 4.3.2 Aoun and Benmamoun (1998): two types of CLLD I

Aoun and Benmamoun (1998), henceforth AB, discuss in detail CLLD I in Lebanese Arabic (henceforth LA). Specifically, they examine how CLLD I interacts with other A-bar dependencies like *wh*-movement and topicalization. An example of CLLD I in LA is exemplified in (48).<sup>29</sup>

- (48) Naadya jeef-a Kariim mbeerih  
Nadia saw.3SM-her Karim yesterday  
'Nadia, Karim saw her yesterday.'

To start with, AB note that the CLLD I-ed element can be separated from its corresponding clitic by an island, as in (49). This is not the case, however, with topicalization where it is not possible for a topicalized phrase to be related to a gap in such a context, as illustrated in (50).

- (49) sməʔt ?nno Naadya rəht mən duun ma təhke maʕ-a  
heard.1S that Nadia left.2SM without COMP talking.2S with-her.  
'I heard that Nadia, you left without talking to her'.

- (50) \*sməʔt ?nno Naadya rəht mən duun ma tʃuffe  
heard.1S that Nadia left.2SM without COMP see.2SF.  
'I heard that Nadia, you left without seeing'.

That the NP-clitic relationship as in (49) is not constrained by an island suggests that some cases of CLLD I in LA are derived by base-generation. This is what is expected, indeed, given the widely-held claim that insensitivity to islands is amenable to a construal analysis.

There are other examples, however, reported by AB which show that there is a movement operation involving the derivation of CLLD I in LA. Consider

<sup>29</sup>A caveat must be introduced: Aoun and Benmamoun (1998) claim that LA has CLLD, but this configuration is known for bearing morphological case on nouns, contrary to LA, which is known to not case-mark nouns. As I argued at length in chapter 2, I refer to this articulation as CLLD I, whose main feature is case-matching. For consistency, I will keep using CLLD I, with the proviso that this disclaimer applies.

the examples in (51).

- (51) a. **Təłmiiz-a** ʃʃitaan                      btaɪrfo ʔanno kəll mʔallme  
 student-her the-naughty.MS know.2P that every teacher.F  
 ʔaasasə-o  
 punished.3SF-him  
 'Her naughty student, you know that every teacher punished him.'
- b. \***Təłmiiz-a** ʃʃitaan                      fallayto ʔablma kəll mʔallme  
 student-her the-naughty.MS left.2P before every teacher.F  
 ʔaasasə-o  
 punished.3SF-him  
 "Her naughty student, you left before every teacher punished him.'

According to AB, the contrast between (51a) and (51b) boils down to the constraint on bound variable construal, according to which operators must c-command their variables. In (51a), it is assumed that a bound variable interpretation of the pronoun obtains via reconstruction: the dXP along the possessive pronoun undergoes reconstruction to a position where they can be c-commanded by the QP 'every teacher'. This interpretation, however, is not available in (51b) because reconstruction is blocked in the presence of an adjunct island, and hence there is no way for the pronoun to be c-commanded by the QP. Crucially, this suggests that the relation between the CLLD I-ed NP and the site of the resumptive pronoun is one of movement: reconstruction is a property of movement chains.

So far, AB suggest a dual analysis of CLLD I in LA: it can be derived by base-generation and movement ( i.e. compare between (49) and (51)). Let us now move on to another complication, namely, how CLLD I interacts with other A-bar operations (like *wh*-movement ), as illustrated in (52, 53).

- (52) \*ʃhu smət                      ʔanno Naadya xabbro ssabe yalli sheef-a?  
 what heard.2sM that Nadia told.3p the-boy that saw.3sM-her  
 'What did you hear that Nadia, they told the boy who saw her?'
- (53) ʃhu smaʔt                      anno Naadya xabbarua-a?  
 what heard.2sM that Nadia told.3p-her  
 'What did you hear that Nadia, they told her?'

The question is how to account for the contrast between (52) and (53). Stated so simply, AB argue that this is a corollary of the dual nature of CLLD I in LA with respect to the derivation. In particular, the sentence in (52) is bad because the base-generated CLLD I-ed element intercepts *wh*-movement. In other words, since the CLLD I-ed NP is an A-bar element, a minimality vi-

olation would surely ensue if the *wh*-word undergoes movement, the reason being that this operation will be intercepted by another A-bar element (i.e. the base-generated CLLD I-ed element).<sup>30</sup> By contrast, no minimality effects arise in (53) due to the claim that the CLLD I-ed element in (53) undergoes movement to an (A)rgument-position, specifically to the specifier of Clitic Projection (CIP) in the sense of Sportiche (1992, 1996). According to AB, the moved status of the dXP in (58) paves the way for the *wh*-word to undergo movement without inducing a minimality violation.<sup>31</sup>

Importantly, AB propose that CLLD I movement is a post Spell-Out operation taking place in the PF component of the grammar. The postulation of a PF movement of CLLD I, according to AB, provides a principled account for the behavior of CLLD I in LA. Particularly,

the issue of why such a PF operation does not intercept the extraction of a *wh*-element or a topicalized phrase ... does not arise. Pre-Spell-Out, the CLLD I-ed element is still in CIP, an A-position, and therefore not in a position that can intercept the movement of a *wh*-element or a topicalized phrase. (AB:591)

On the other hand, the base-generated CLLD I-ed element appears in A-bar position at the syntax proper, and hence it can intercept both *wh*-extraction and topicalization. They conclude then that Minimality is a condition on well-formed derivations in both syntax proper and the LF component, but not on PF representations.

Summarizing thus far, CLLD I in LA can be derived by either base-generation or movement. Given the puzzling nature of CLLD I in LA when interacting with other A-bar dependencies, AB argue for a PF movement of CLLD I. Crucially, this movement is driven by PF filters like the Doubly Filled Specifier/Head Filter. On the other hand, other A-bar dependencies (i.e. focus fronting, *wh*-movement, topicalization etc.) operate in the syntax proper (i.e. pre-Spell-Out operations) and hence interception effects arise.

#### 4.3.2.1 Discussion

As noted by many authors, AB's treatment fails to distinguish between CLLD I and another analogous construction I have termed CLLD II here (Villalba 2000;

<sup>30</sup>Recall that minimality effects arise if an element crosses a position where it could have landed (Rizzi 1990).

<sup>31</sup>Interestingly, this seems to be the exact opposite of what was assumed (implicitly) in the discussion of Iatridou's proposal above, namely that base-generated adjuncts do not invoke such minimality violations, while moved ones do.

[Soltan 2007](#)). For one thing, insensitivity to islands is a hallmark of HTLD articulation, that is CLLD II, and hence all data disobeying locality conditions must be taken as instances of CLLD II ([Cinque 1990](#)). But, this is not the case for the proposal of AB since they report an example violating an island, which is taken, without justification, as an instance of CLLD I. Pending further analysis showing how these observations can be accommodated under a CLLD I analysis, AB's analysis must be taken with extreme caution since the ontological basis is somewhat misguided. See section 6.4.4.2 for my proposal on why CLLD I in MSA is insensitive to islands.

Apart from the proper distinction between CLLD I and HTLD (CLLD I II), AB's analysis has to face empirical as well as conceptual problems. First come the reconstruction effects figured prominently in AB's analysis and that of [Aoun et al. \(2001\)](#). Specifically, these authors argue for an intertwined relation between reconstruction and movement: if the dXP behaves as if it was in the launching site, this entails that a lower copy has been activated in a movement chain. This position is not without shortcomings, however. A case in point comes from Dutch, with connectivity effects being obtained without appeal to syntactic movement. By way of illustration, consider the example in (54), taken from [Van Craenenbroeck \(2010: p.43\)](#).

- (54) Naar zijn<sub>i</sub> promotie, daar<sub>j</sub> kijkt [iedere taalkundige]<sub>i</sub> naar t<sub>j</sub> uit.  
to his defense there looks every linguist to out  
'Every linguist looks forward to his defense.'

The sentence in (54) features Contrastive Left Dislocation (CLD), a CLLD I-similar construction found in Germanic languages. Of special importance here, according to [Van Craenenbroeck](#), is the fact that the preposition '*naar*' has been left stranded in the IP internal position preceding the gap. This gap, by virtue of preposition subcategorization frame, must be a DP. On the basis that the dXP is a Preposition Phrase (PP), it follows then that it is unlikely that the dXP undergoes movement from within IP. Interestingly though, Dutch CLD in (54) still exhibits connectivity effects in that the pronoun *zijn* 'his' can be bound by the subject *iedere taalkundige* 'every linguist' and hence can be interpreted as a bound variable. In other words, a c-command relation can be established between the quantifier and the pronoun for a felicitous interpretation of the pronoun. Crucially, this means that reconstruction for the purposes of binding and scope should be dissociated from syntactic movement. Further evidence against the relation between reconstruction and movement comes from clefts and pseudoclefts. Specifically, although these configurations display conspic-

uous connectivity effects, there is mounting doubt in the literature that these effects can be captured by appeal to syntactic mechanisms which are typically couched in movement terms (Heycock and Kroch 1999; Schlenker 2003). Given that this area is a field of research on its own, I will not explore it at length but will pick one analysis entertained by Svenonius (1998: p.180) cited in Van Craenenbroeck (2010: p.45).

(55) ?It is himself<sub>i</sub> who<sub>k</sub> John<sub>i</sub> likes best t<sub>k</sub>

This sentence features a cleft with a *wh*-phrase in the embedded SPEC-CP. According to Svenonius, these clefts are derived by base-generation of the pivot (i.e. *himself*) coupled with movement of the *wh*-word to the embedded SPEC-CP. Svenonius argues that connectivity effects can be captured without recourse to syntactic movement. In particular, the base-generated anaphor can be bound by the embedded subject (i.e. *John*) without necessarily establishing a c-command relation typical of Principle A of Binding Theory.

Perhaps the strongest argument against the assumption aspiring to equate reconstruction effects with movement comes from Guillot and Malkawi (2007), henceforth GM, where it is argued that reconstruction effects can be captured under a base-generation analysis, *viz.*, reconstruction is orthogonal to movement. To start with, GM note that the dXP can be linked to its corresponding clitic across a strong island in Jordanian Arabic (JA).<sup>32</sup> This is exemplified in (56).

(56) [talib-ha<sub>i</sub> l-kassul]<sub>j</sub> l-mudiira zi?lat la?annuh [kul  
student-her the-bad the-principal upset.3sf because every  
m?alimah]<sub>i</sub> shafat-hu<sub>j</sub> hu<sub>j</sub> yaghish bi-li-mtihan  
teacher saw.3sf-CL CL-he cheated.3sm in-the-exam  
'Her bad student, the principal got upset because every teacher saw  
him cheating in the exam.'

Given the fact that the relation between the dXP in (56) along with the posses-

<sup>32</sup>Importantly, the sentence in (56) lends further support that AB's analysis tends to be language-specific, since it cannot account for the fact that reconstruction into strong islands is still a possibility from a cross-linguistic perspective. In addition to JA, Biloa (2013: p.249) cites a similar pattern in Tuki, where reconstruction for variable binding into islands is possible. Thus, it remains to be seen how these data can be accommodated within an analysis arguing for a strict ban on reconstruction into strong islands. Even worse, island-sensitivity does not automatically imply reconstruction since there are languages which do not exhibit reconstruction effects. A prominent case in point is Scottish Gaelic as shown by Adger and Ramchand (2005). MSA does not display reconstruction effects as well with respect to Condition A and variable binding for independent reasons, which are already discussed in chapter 2.



sive pronoun is intervened from its clitic by an adjunct island, the immediate question arises: how does a bound variable interpretation of the possessive pronoun 'her' still obtain? The first option which must be excluded is the syntactic movement for the simple reason that there is an opaque island (i.e. adjunct island) blocking extraction. Thus, we are left with one option, *viz.*, base-generation. But then, how to derive the fact that the possessive pronoun still gets a bound reading interpretation under base-generation? Recall that for a bound reading interpretation to obtain in configurations of the sort depicted in (56), the QP must c-command the possessive pronoun. In sum, what the sentence in (56) implies is that there is co-variance without c-command. To go about this paradox, GM adopt the NP-ellipsis theory of resumption by [Elbourne \(2001\)](#). In particular, pronouns are taken to be definite determiners whose NP-complement has been elided. The empirical basis of the NP-ellipsis theory of resumption comes from so-called '*paycheck pronouns*' shown in (57).

- (57) John gave his paycheck to his mistress. Everybody else put it in the bank. ([Elbourne 2001](#): p.271)

According to [Elbourne](#), the pronoun '*it*' is interpreted as '*his paycheck*'. Given the fact that the pronoun '*it*' occurs in the c-command domain of the QP, there is a possibility for a bound reading interpretation for the possessive pronoun in '*his paycheck*' (i.e. under the reading that there is a different check for each person [x is a paycheck : everybody put x in the bank]). However, due to the fact that the nature of syntactic movement is clause-bounded, this reading cannot obtain by recourse to movement under reconstruction (i.e. '*his paycheck*' and '*it*' occur in different clauses). Interestingly though, the NP-ellipsis theory of resumption captures this reading elegantly by assuming that the pronoun '*it*' subcategorizes for the NP complement '*paycheck of him*', which is crucially elided in the PF component of the grammar, but still present at LF.

- (58) John gave [DP the [NP paycheck of him]] to his mistress. Everybody else put [DP it [NP ~~paycheck of him~~]] in the bank.

According to this representation, the elided NP complement is c-commanded by the QP '*everyone*', which amounts to a covariant interpretation of the pronoun '*it*'. What is relevant, according to GM, is that this analysis can be extended neatly to dislocated XPs in JA. That is, to account for the possibility of reconstruction into a strong island in JA, GM propose that the sentence in (56) corresponds to the scheme shown in (59).



- (59) [talib-[ha<sub>i</sub>l-kassul]<sub>j</sub> ...[kul mʔalimah]<sub>i</sub> ... [DP-uh [NP ~~talib[ha<sub>i</sub>l-kassul]~~<sub>j</sub>  
 student-her the-bad .... every teacher... [DP -him [NP ~~bad student of her<sub>i</sub>~~]]

The upshot of this analysis, thus, is that reconstruction is possible into a strong island iff reconstruction is taken to not be deterministically related to syntactic movement. In GM's parlance, "(b)e it via resumption or not, if an XP allows for (A') reconstruction, a copy of that XP (rather than *movement* of that XP) should be present" (italics mine).

Another problem for AB's analysis comes from the nature of PF movement of CLLD I. As argued convincingly by Boeckx (2003: p.135), PF movement of CLLD I is not defined in the run-of-the-mill PF terms (i.e. prosodic terms). This is evident from AB's proposal according to which movement is not operating in a local fashion. In Boeckx's parlance, this state of affairs is "unheard of for standard PF-processes". Further, concerning the implementation, it is unclear under AB's proposal how PF has access to the information available in the syntax proper. In particular, given the standard assumptions that intervention effects, locality conditions and bound anaphora are part of narrow syntax, it remains to be seen how the relational notions employed by these operations, such as c-command and intervention effects, can be implemented in the PF component of the grammar.<sup>33</sup>

A particularly problematic aspect of PF movement of CLLD I is the question: how CLLD I-ed elements are case-assigned the same morphological case as the clitic? I am aware that AB discuss Lebanese Arabic, a variety of Arabic which does not mark DPs morphologically, and hence the question of case-assignment will not arise to begin with. But, for the empirical coverage, one needs to investigate whether this analysis could apply to those languages making use of morphological cases on DPs, including MSA. To be precise, AB argue that the CLLD I-ed element is originated in SPEC-CIP (Clitic Phrase), which is an A-position after Sportiche (1992, 1996). They are not explicit enough, though, about how this structural position could play a role in case-assignment, or checking in minimalist terms.

As far as Sportiche's proposal is concerned, it is unclear at this point how

<sup>33</sup>This objection can be interpreted as that "at present we have no theory whatsoever of what the properties of such [PF] movements might be" (McCloskey 1999: p.207), and that "UG should not contain two classes of otherwise similar movement operations distinguished in principle by having or not having an effect on interpretation." (Kayne 2000: p.44).

AB's analysis fits in with Sportiche (1992, 1996)'s theory of clitics.<sup>34</sup> According to Sportiche, clitics are taken to be functional heads projecting their own maximal projection in the domain of TP, specifically above VP as schematized in (60).

(60) [TP [CIP [VP ]]]

The relation between the clitic and the doubled element in cases of clitic doubling is established in a spec-head configuration. This agreement relation is subsumed under what is termed Clitic Criterion, which is reminiscent of *wh*-Criterion (Rizzi 1991). Under the standard assumption that movement must be triggered, the doubled DP undergoes either covert or overt movement, to the SPEC-CIP to check [+F] feature. [+F] stands for a set of features like topic, Neg, phi-features etc. The nature of this movement operation, be it overt or covert, is regulated by Clitic Constructions Parameters (Sportiche 1996).<sup>35</sup> What is relevant, though, is that for direct object clitics, it is argued that the clitic licenses specificity on its specifier. Moreover, the doubled DP in the context of CLLD I articulations necessarily undergoes *overt movement* to the SPEC-CIP, *contra* Aoun and Benmamoun's characterization. Since movement is involved, this means that the relation between the clitic head and the specifier (i.e. the dou-

<sup>34</sup>This does not mean that Sportiche's proposal is so universally accepted that any other proposal about constructions involving clitics should be compatible with it. My point, instead, is that Aoun and Benmamoun claim that they follow Sportiche's proposal, but without giving the reader an impression that they indeed *diverge* from it.

<sup>35</sup>For completeness, Sportiche sets the following clitic parameters:

a. **Clitic Parameters**

- Movement of XP to the SPEC-CIP occurs overtly and covertly.
- Head (Cl)itic is overt or covert.
- XP is overt or covert.

According to Sportiche, these parameters capture the following constructions:

1. Undoubled clitic constructions (as in French or Italian) arise when a covert XP moves overtly or covertly to the SPEC-CIP with an overt Cl.
2. Clitic doubling constructions (as in Spanish) arise when an overt XP moves covertly with an overt Cl.
3. Scrambling (as in Dutch and German) arises when an overt XP moves overtly with a covert Cl.
4. CLLD I (as in Italian and Arabic) arises when an overt XP moves overtly with an overt Cl to the SPEC-Cl and then beyond to check Topic feature encoded in CLLD I articulations.

bled DP) is constrained by locality conditions. As it stands, the proposal of AB does not seem to follow the spirit of Sportiche's analysis of clitic constructions. Specifically, AB assume the other way round: the CLLD I-ed element is derived by either base-generation or PF movement. When it is externally merged in an A-bar position, Minimality would ensue since this will create intervention effects for other A-bar constructions, but when it is reconstructed to the SPEC-CIP, minimality effects vanish since this position is taken to be an A-position and hence A-bar elements will not be intercepted. While this needs not to be problematic for AB whose analysis departs from intervention effects which appear to be a quirk of LA and Arabic in general<sup>36</sup>, it remains to be seen to what extent their proposal is squarely within that of Sportiche, i.e., the CLLD I-ed element undergoes overt movement, and this movement is necessarily feature-triggered<sup>37</sup>.

An underlying assumption in AB's treatment is that resumptives in LA are the lexicalization of a gap, that is, the gap is interpreted as a resumptive by insertion of a pronoun at PF. As argued earlier, there is a semantic distinction between gaps and resumptives in that they cannot be grouped together under one umbrella. Apart from this, this stance crucially presupposes that the resumptive is merely a spell-out element in a movement chain.<sup>38</sup> Given the copy theory of movement (Chomsky 1995; Nunes 2004), this is typically related to the claim where more than one copy of the same element can be realized overtly. But then, the question arises: how is this implemented? In fact, it is quite unlikely that this operation is implemented in accordance with the copy theory of movement, which requires the two copies be *nondistinct*. As is well-known, the inserted copy in a CLLD I articulation is obligatorily modified to involve the "weakest type of pronominal available in the language at

<sup>36</sup>As noted by Rizzi (2001), "topics form a separate class from other A'-dependencies" in that they do not give rise to relativized minimality (i.e. they do not intervene with other A'-dependencies of the same type such as *wh*-operators and focused elements). Building on Starke (2001), Rizzi (2004) reaffirms this stance arguing that minimality is relativized to feature type. Since [+TOP] and [+OP], which correspond to topic and focus respectively, are different, the absence of relativized minimality is just expected. What is crucial is that Arabic (i.e. both LA and MSA) seem to diverge from this in that topical expressions do intercept other topics (Aoun et al. 2010; Ouhalla 1994a). This is not the case, however, cross-linguistically. For example, Fernández-Sánchez (2016: p.120) cites some examples featuring Spanish left dislocation, where two elements can be left-dislocated. Interestingly, neither intervenes the other under any possible order.

<sup>37</sup>Even if these problems are overcome, the stipulative nature of Sportiche's proposal does not go unnoticed in the literature. Since this thesis is not meant to be a rebuttal of Sportiche's proposal *per se*, the reader is referred to Kechagias (2011: p.129f) for criticism.

<sup>38</sup>It should be noted, however, that AB do not discuss all movement facts which are typically employed in the dislocation debates such as crossover effects and parasitic gaps licensing.

issue". (Alexopoulou et al. 2004: p.333, fn.2). This happens to be a clitic in MSA. Further, even if one assumes that the relation between the CLLD I-ed element and its corresponding clitic is regulated by the copy theory of movement, it is unclear how this can be implemented in accordance with Kayne's (1994) Linear Correspondence Axiom (LCA). According to Nunes (2004: p.46), linearization of configurations involving clitic duplication is "possible *only* if a morphological reanalysis renders one of the copies invisible to LCA" (italics mine). More on LCA below. This connects to another issue concerning semantic interpretation. In particular, AB adopt a Big-DP analysis of CLLD I in LA, at least for those cases involving movement, where the resumptive pronoun is "cliticized onto the left-dislocated NP and remains behind when the latter moves" (Elbourne 2005: p.177). According to this analysis, the clitic is merged together with the dXP and stays behind when the latter moves, meaning that there is a (not-spelled-out) trace of the dXP plus the clitic in the base position. This state of affairs, according to Elbourne, runs into a problem with semantic interpretation: we will have two sisters (i.e. a clitic and a trace) bearing a type [e] in the semantic representation, rendering semantic composition impossible. More on the Big-DP analysis in section 5.4.1.2.

This completes my discussion of AB's proposal.

## 4.4 Clitic Right Dislocation (CLRD)

### 4.4.1 Kayne (1994): Right Dislocation as LF movement

In his seminal monograph on the linearization of syntactic structures, Kayne (1994) proposes an influential theory to capture how syntactic structures are mapped onto linear phonetic strings, where the latter can be read off the former (i.e. syntactic structures). The central principle regulating this mapping is the so-called Linear Correspondence Axiom (LCA), according to which "asymmetric c-command invariably maps into linear precedence" (ibid:3).

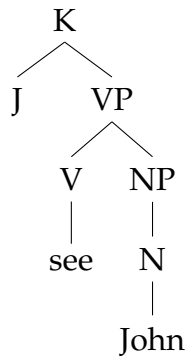
(61) *Linear Correspondence Axiom* (Kayne 1994: p.33)

Let X, Y be nonterminals and x, y terminals such that X dominates x and Y dominates y. Then if X asymmetrically c-commands Y, x precedes y.

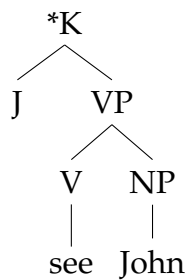
To be concrete, consider the representations in (62) and (63), adapted from Kayne (1994: p.10). According to Kayne, (62) is a well-formed phrase marker

owing to the assumption that V asymmetrically c-commands N and hence 'see' precedes 'John', rendering the configuration linearable. By contrast, the problem in (63) is that 'see' and 'John' c-command each other, so the structure cannot be linearised.

(62)



(63)



Since the early days of the cartographic enterprise (Rizzi 1997; Cinque 1999), LCA has been taken to be part and parcel of modelling the syntactic cascade of functional projections encoding discourse features by looking at word order restrictions. Indeed, *The Antisymmetry of Syntax* has serious repercussions on our theory of grammar *in toto*, but discussing this topic in all its breadth will take us too far afield. What is relevant, though, is that a peripheral view of right dislocation either via movement or base-generation is not compatible with LCA. By way of illustration, consider the representation in (64).

(64) [ZP [... [TP [T [VP [V ] ] ] ] ] ] <sup>39</sup>

According to the representation in (64), the dXP asymmetrically c-commands the T head. On the assumption that asymmetric relation is at work, you would predict that the order [dXP<T] will obtain. This prediction, however, is not

<sup>39</sup>This representation presupposes that the right-dXP targets the maximal projection ZP either by movement or right-adjunction.

borne out since this order is not a faithful reformulation of the surface strings (i.e. the fact that the right dXP ends up rightward).

According to [Kayne \(1994: p.78\)](#), a peripheral view of right dislocation is prohibited in accordance with LCA and hence a theoretical way out must be entertained. To see how [Kayne](#) goes about this problem, consider the example in (65).

- (65) Jean la voit souvent, Maria  
       Jean her sees often     Mary  
       'Jean sees her often, Mary' [Kayne \(1994: p.79\)](#)

The right-dXP in (65) is taken by [Kayne](#) as an instance of clitic doubling, where the right-dXP is externally merged as the complement of the V head. The problem, however, is the fact that right-dislocation and clitic doubling are not identical. For one thing, right dislocation and clitic doubling are different on prosodic grounds: while the dXP in right dislocation constitutes an intonational phrase on its own, the complement in clitic doubling does not. Hence, if the right-dXP in (66) is taken as being prosodically integrated into the host clause, the sentence turns out to be ungrammatical.

- (66) \*Jean la voit souvent Marie. [\(Kayne 1994: p.83\)](#)

To account for the observed asymmetry between (65) and (66), [Kayne](#) proposes that the right-dXP 'Maria' undergoes LF-movement to the left periphery as shown in (67).

- (67) LF: [<sub>TP</sub> Marie<sub>i</sub> [<sub>TP</sub> Jean la voit souvent t<sub>i</sub>]]

This movement is triggered by "an optional feature present in the "overt syntax" that would feed both LF (triggering CLLD I-type movement) and PF (triggering a certain intonation contour)" ([Kayne 1994: p.83](#)). Further, he claims that right-dislocation in French is regulated by the constraint in (68).

- (68) No clitic can asymmetrically c-command its corresponding doubled lexical phrase at LF.

Therefore, the asymmetry between (66) and (67), according to [Kayne](#), is argued to follow from this constraint, that is, (66) is ungrammatical because the doubled XP is asymmetrically c-commanded by the clitic. This state of affairs does not obtain in (67), however, since LF movement bans the clitic from c-commanding the doubled XP. In sum, right dislocation is taken as CLLD I at

#### 4.4.1.1 Discussion

Despite its appeal, and indeed its adoption as a tenet of generative grammar on architectural grounds, Kayne's (1994) treatment of right dislocation in particular is not without shortcomings.<sup>40</sup> The far-reaching drawback is that right-dXPs are not in-situ elements in the overt syntax from a cross-linguistic perspective. To spell out my stance clearly, I provide three arguments militating against the proposal that right dislocation is an LF operation.

The first argument comes from word order restrictions with respect to locative complements and direct objects in MSA. In particular, the locative complement is obligatorily preceded by the direct object in this language. This is exemplified in (69).<sup>41</sup>

- (69)    waðʕtu al-sikināt?    fi al-maDbax-i  
          put.1SG the-knife-ACC in the-kitchen-GEN  
          'I put the knife in the kitchen.'
- (70)    \*waðʕtu fi al-maDbax-i    al-sikināt-ʔ  
          put.1SG in the-kitchen-GEN the-knife-ACC  
          Intended meaning 'I put the knife in the kitchen.'

On the assumption that right dislocation is derived by LF movement, we would predict that the order [direct object < locative complement] will obtain under right dislocation, given the proposal that the right-dXP is in an argument position in the syntax. This prediction, however, is not borne out, that is, when the direct object is right-dislocated, the locative complement (i.e. prepositional phrase) must precede it. By way of illustration, compare between (69) and (71).

- (71)    waðʕtu-ha    fi al-matbaxi,    al-sikināt-a  
          put.1SG-it.ACC in the-kitchen-GEN the-knife-ACC  
          'I put it in the kitchen, the knife.'

<sup>40</sup>In fact, Kayne's (1994) analysis of clitic right dislocation ties in with his theory of linearization of syntactic structures (i.e. LCA) according to which all movement is to be the left; regarding base-generation, it is assumed that specifiers uniformly (or universally? as per Kayne) precede heads and that heads precede their complements. Nonetheless, Kayne's proposal does not go unchallenged in the literature, with proposals arguing for either rightward movement or rightward adjunction; see contributors to Beermann et al. (1997) and De Cat (2007) respectively.

<sup>41</sup>See also Zubizarreta (1998: p.151f) and Vallduví (1992: p.99f); Fernández-Sánchez (2017: p.23) for a similar distinction between right-dislocated objects and de-accented in-situ objects attested in Standard Spanish and Catalan respectively.



When a clitic is present, characteristic of right-dislocation, word order and intonation must be as in (71) (i.e. the direct object must follow the locative complement). As (72) shows, the right-dislocated object is not allowed to precede the locative complement.

- (72) \*waðʕtu-ha al-sikinat-a fi al-matbaʕ-i  
 put.1SG-it.ACC the-knife-ACC in the-kitchen-GEN  
 'I put it in the kitchen, the knife.'

What this suggests is that, whatever the case may be for French, [Kayne's](#) analysis cannot be extended to cover CLRD I in Arabic, since what we have seen shows that dXPs here are in some more right-peripheral position, not the base position for an object. This is evident from the fact that the dXP in (71) is syntactically and prosodically separated from the rest of the clause: while the presence of the clitic instead of a gap in the numeration of the host clause entails that the dXP is merely an 'added on' element in (71) ([Ott and De Vries 2016](#)), this can be enhanced by the cross-linguistic generalization that the dXP in right dislocation forms an independently intonational phrase ([Zubizarreta 1998](#)). Informally speaking, the dXP under base-generation does not interact with the host clause.

A further empirical piece of evidence for the externality and against the 'argumenthood' of the doubled elements in right dislocation comes from extraction. The argument goes that if the doubled element is merely an argument in situ, we predict that it would be a transparent domain for extraction, as shown in (73).

- (73) Wen<sub>i</sub> hat Maria behauptet dass er<sub>i</sub> geküsst hat?  
 who has Maria claimed that he kissed has  
 'Who did Maria claim that he kissed?'

German ([Ott and De Vries 2016](#): p.657)

However, this prediction is not borne out as the example in (74) below shows. In particular, if the dislocated object is in-situ, one would expect that it should allow extraction, as the case with the non-dislocated counterpart shown in (73). As such, the degradedness of (74) falls out straightforwardly by assuming that right-dXPs are opaque domains for extraction, which are apparently frozen in place. As it stands, it is unclear thus how the external/peripheral nature of dXPs can be accommodated under an LF movement along the lines of [Kayne](#), which proposes that the doubled element in right dislocation is in an argument position in the syntax.



- (74) \*Wen<sub>i</sub> hat Maria das behauptet, dass er t<sub>i</sub> geküsst hat?  
 who has Maria that claimed that he kissed has  
 \*'Which person did Maria claim it, that he kissed?'

German (Ott and De Vries 2016: p.657)

Second, De Cat (2002: 119-120) argues that Kayne's account undergenerates, since it does not account for (i) right-dislocated subjects (75), (ii) right-dislocated phrases which do not occupy the object position (76), and (iii) right-dislocated phrases resumed by a non-clitic element (77).

- (75) Elle<sub>i</sub> ignore les sujets disloqués, son analyse<sub>i</sub>.  
 she ignores the subjects dislocated his analysis  
 'His analysis ignores dislocated subjects.'
- (76) On va les<sub>i</sub> manger avec des pommes, ces petits enfants<sub>i</sub>.  
 one will them eat with some apples these little children  
 'We'll eat these little children with apples.'
- (77) Il aime ça<sub>i</sub> la chair fraîche<sub>i</sub>.  
 he loves that the flesh fresh  
 'He love fresh flesh.'

As for the right-dislocated subject in (75), De Cat argues, *contra* Kayne, that the subject cannot be externally merged in the VP-internal position due to the assumption that Spoken French disallows clitic doubling of subject. In (76), the object is not in the object position since it follows a VP adjunct. As far as (77) is concerned, the clitic [ça] 'that' cannot be doubled by an object, rendering Kayne's proposal obsolete.<sup>42</sup>

Third, the proposal trying to unify clitic doubling and right dislocation under the same category overlooks the fact that the two phenomena display a number of systematic differences (Anagnostopoulou 2006). I will return to these fine-grained differences in section 5.4.1.2. For now, I will pick one difference concerning whether a single language can entertain both constructions simultaneously. To start with French, the literature on right-dislocation in French seems to be uniform: French allows right dislocation, but the claim that it allows for clitic doubling is "controversial" (De Cat 2002: p.120). In particular, De Cat calls into question Kayne's claim that French has clitic dou-

<sup>42</sup>It should be noted that De Cat (2007: p.142) discusses the possibility, which is raised by Kayne (1994: p.118), that "the right-dislocated subject is in the VP-internal position where the subject originates, and that the object is in [spec,AgroP], thus creating the subject-final order displayed in [75]." Nonetheless, De Cat dismisses such a possibility as untenable because spoken French does not allow for clitic doubling of the subject. For further discussion, the reader is referred to De Cat (2002: sec.3.2) and De Cat (2007: sec.2.2).

bling, maintaining that clitic doubling is only verified in French when (i) the doubled object is a strong pronoun as illustrated by the contrast between (78a) and (78b), or (ii) a construction expresses inalienable possession as in (79). Crucially, if the possession is not involved, clitic doubling is disallowed (80a), and hence it must be expressed by a possessive determiner (80b).

- (78) a. Jean lui a parlé à elle  
 Jean to-her has talked to her  
 'Jean talked to her' (Kayne 1994: p.80)

- b. \*Jean lui a parlé à Gudule  
 Jean to-her has talked to Gudule  
 (De Cat 2002: p.120)

- (79) Une pierre lui est tombée sur la tête, à Jean  
 a stone to-him is fallen on the head to Jean  
 'A stone fell on Jean's head.' (Kayne 1994: p.80)

- (80) a. \*Une pierre lui est tombée sur la<sub>i</sub> brouette à Jean<sub>i</sub>  
 a stone to-him is fallen on the wheelbarrow to Jean  
 'A stone fell on Jean's wheelbarrow'
- b. Une pierre est tombée sur sa brouette à Jean  
 'A stone is fallen on his wheelbarrow to Jean  
 'A stone fell on Jean's wheelbarrow' (De Cat 2002: p.120)

On the other hand, [Anagnostopoulou \(2006: p.526\)](#) takes a radical stance arguing that French disallows clitic doubling altogether. As far as Arabic is concerned, clitic doubling is attested in some varieties of Arabic. See [Shlonsky \(1997\)](#); [Aoun \(1981, 1999\)](#) on Palestinian and Lebanese Arabic respectively. To the best of my knowledge, I am not aware of a single work arguing for the presence of right dislocation in Arabic varieties. As for MSA, clitic doubling is not attested as shown by the contrast between Lebanese Arabic (81) and MSA (82).

- (81) Kari:m ji:f-o la Sami  
 Karim saw.3SG-him to Sami  
 'Karim saw Sami.' (Aoun 1999)

- (82) \*Kari:m-un raaʔa-o la Samy-an  
 Karim-NOM saw.3SG-him to Sami-ACC  
 'Karim saw Sami.'

In (81), the clitic 'o' doubles the direct object 'Sami'; both of them share the same  $\theta$ -role with the full DP occurring in the regular argument position. By

contrast, MSA disallows this configuration, as in (82), except for one instance: when the doubled element is an adjunct being coreferential with the host clause via a pronominal clitic (i.e. CLRD I). This is exemplified in (83).

- (83) Zurtu-\*(hu), Zaydan  
 visited.1SG-ACC Zayid-ACC  
 'I visited him, Zayid'

Crucially, it should be noted that the doubling clitic in Lebanese Arabic is optional ([Aoun 1999](#)), but this is not the case for MSA where for a bonafide right-dislocation to obtain, the presence of the clitic is obligatory. In the absence of the clitic, however, the sentence in (83) ceases to be an instance of dislocation, but rather an instance of a 'predicate-argument' configuration.

Finally, recall that [Kayne](#) attributes the ungrammaticality of (66) to the constraint proposed in (68) according to which a clitic cannot c-command its doubled XP. This, however, does not hold under empirical scrutiny. According to the example in (84), cited by [Kayne](#) himself ([Kayne 1994](#): p.80), the clitic asymmetrically c-commands *elle* 'her'. On the constraint proposed in (68), this sentence should be ungrammatical, contrary to fact; see also [Fernández-Sánchez \(2017](#): p.80) for a similar observation.

- (84) Jean \*(lui) a parlé à elle  
 Jean to-her has talked to her  
 'Jean talked to her'

At any rate, the postulation of LF movement to derive the properties of right dislocation does not seem to be a tenable solution, at least according to the version proposed by [Kayne](#). In particular, the evidence provided so far strongly argues for the proposal that the doubled elements in right-dislocation cannot be in the object position in the syntax, but rather in an adjoined position in the syntax. The question which arises at this point: where does the dXP appear? Indeed, this is the topic of the next section, where I review two main views with respect to the derivation of the dXP in clitic right dislocation: a movement-based analysis and a construal-based analysis. Both of these approaches defend the proposal that the dXP appears in the C-domain.

#### 4.4.2 TP-external approaches to right dislocation

An influential pole in the analysis of right dislocation argues that the dXP appears in the C-domain of the clause. After [Samek-Lodovici \(2015](#): p.77), I

will call these analyses “TP-external” approaches. Despite that all these analyses agree uniformly that the dXP is in the C-area external to the inflectional domain, they however disagree on how the dXP reaches the C-area. On the one hand, some authors maintain that the dXP is externally merged in the C-domain (Cardinaletti 2002; Frascarelli 2004; De Cat 2002, 2007; Zwart 2001). On the other hand, others argue for the proposal that the dXP is externally merged in the thematic domain within the VP and from there it undergoes movement to the C-domain (Vallduví 1992; Samek-Lodovici 2006, 2015). In sum, this dichotomy is reminiscent of Cinque’s paradox. The two analyses are schematically illustrated in (85) and (86). Note that CL and [α] correspond to clitic and the dXP respectively.

(85) CL t(α) ... α [**movement**]

(86) CL ... (α) [**base-generation**]

To keep discussion within manageable limits, I will first highlight the rationale for movement-based analyses, and then I will do the same with base-generation counterparts. I finally conclude by general remarks on the shortcomings that each approach has to face.

#### 4.4.2.1 Right dislocation is derived by movement

According to this approach, the dXP is predicted to show symptoms of movement. This prediction is indeed borne out given the fact that there are some facts which point out that the dXP has been within the TP domain at some point of the derivation. First, the dXP in right dislocation is typically interpreted as having the same θ-role it would have were it within the VP domain, as illustrated in (87).

(87) qaratu-hu                      lilata albarihata, kitaba  
       read.1SG-it [theme] last night,        book-ACC [theme]  
       al-ʃiʃri                      haða  
       the poetry-GEN this  
       ‘I read that book of poetry last night’

Second, the dXP must bear the same morphological case it should have were it in its canonical position within the thematic domain. In (88) and (89), the dXP is case-marked accusative displaying the same case as the pronominal element inside the IP-internal position. On the assumption that case is assigned by a case-assigning predicate or a functional head, the plausible explanation is that

the dXP has been within the TP at some point of the derivation.

- (88) laygatu-hu, Zayid-an  
 meet.1SG-ACC Zayid-ACC  
 'I met him, Zayid' MSA

- (89) ég þekki hana ekkert, dóttur hans.  
 I know her.ACC nothing daughter.ACC his  
 'I don't know her at all, his daughter.'

Icelandic ([Thráinsson 2007](#): p.363)

Configurations involving Condition C further support the claim that the dXP in right dislocation displays reconstruction effects (i.e. the dXP occurs within the c-command domain of the correlate). By way of illustration, consider (90-92) where it seems that the dXP reconstructs to the IP-internal position occupied by the correlate, giving rise to a violation of Principle C. According to an External Merge-account for CLRD, the ungrammaticality of these sentences is unexpected since the dXP is externally merged in a position which is outside the TP projection and hence it is not c-commanded by the head (T) nor other non-dislocated elements within (TP). Notwithstanding, the sentences depicted in (90-92) are ungrammatical. The plausible explanation then is to assume that at some point of the derivation the dXP occurs IP-internally. That is, the dXP has been reconstructed to the position occupied by the correlate, giving rise to a Condition C violation.

- (90) \*pro<sub>i</sub> qarʔu-hu<sub>i</sub> albariha ʔkitaba alyian<sub>i</sub>  
 pro read it-ACC last night book-ACC Ali-GEN  
 '\*He<sub>i</sub> read Ali<sub>i</sub>'s book' MSA

- (91) \*Sie hat ihn mit einer Anderen gesehen Marias Freund  
 She has him with a.FEM different seen Maria's boyfriend  
 '\*She<sub>i</sub> saw Maria<sub>i</sub>'s boyfriend with a different girl.'

German ([Ott and De Vries 2016](#))

- (92) \*pro<sub>i</sub> lo metió en la secadora, el suéter de Ana<sub>i</sub>  
 pro it put in the dryer the sweater of Ana  
 'He/she<sub>i</sub> put it in the dryer, Ana<sub>i</sub>'s sweater.'

Catalan ([Fernández-Sánchez 2017](#): p.30)

#### 4.4.2.2 Right dislocation is derived by base-generation

According to this view, the dXP is externally merged in the C-area. Essentially, this position makes a strong prediction according to which the dXP is disassociated from the host clause. This prediction is borne out on the basis of a battery of arguments. For brevity, I will provide two arguments. To begin with, the base-generated status of the dXP is evident from the fact that the host clause containing the correlate is syntactically and semantically complete rendering the presence of the dXP superfluous. By way of illustration, consider the Arabic example in (93).

- (93) a. laygatu-hu, Zayd-an  
meet.3SG-ACC Zayd-ACC  
'I met him, Zayd'  
b. laygatu-\*(hu)  
meet-3SG.ACC  
'I met him'

According to (93), the presence of the dXP '*Zaydan*' is not obligatory since it can be dropped without inducing any ungrammaticality. The absence of the dXP, however, is not random but is conditioned by the fact that the referent, represented here by the clitic '*hu*', must be known to the hearer. In a sense, the dXP has more or less an adjunct status, which is not part of the composition of the matrix clause. A further piece of evidence supporting this conclusion comes from Dutch, with the correlate being obligatory in CLRD involving arguments but optional in adjuncts (Zwart 2001; Ott and De Vries 2016).

- (94) a. Ik heb \*('m) gezien, die man  
I have him seen that man  
'I saw him, that man'  
b. Ik heb (toen) een man gezien, gisteren  
I have then a man seen yesterday  
'I saw a man then, yesterday'

As shown in (94a), right-dislocating arguments co-occurs obligatorily with a clitic. This is not the case, however, with adjuncts (94b). Taken together, this indicates that the dXP is not part of the matrix clause, and semantically it can be taken as an 'added on' element, whose presence is not necessary to satisfy the valency requirements of the IP-internal predicate (Ott and De Vries 2016).

Second, if the dXP in CLRD does involve movement, one would predict that it gives rise to weak crossover (WCO) effects and that it licenses parasitic

gaps (PGs). This is, however, not the case as illustrated by Arabic and Italian examples in (95) and (96) respectively. Under the claim that triggering WCO effects and licensing PGs are characteristic of configurations involving A-bar movement ([Richards 2014](#)), it follows then that right dislocation favors an External Merge analysis, with the dXP being base-generated in the C-domain.

- (95) a. umu-hu tuhibu-hu, (aʕnni) ali-an  
 mother his loves.3SG-him, (I mean) Ali-ACC  
 Intended 'his mother loves him, Ali'
- b. \*bahaθtu ʕan-hu doon ʔan ʔaʒida pg, haða ʔlkitab  
 search about-it without finding, this book  
 'I have searched this book without finding, this book'
- (96) a. Suei madre l' ha sempre apprezzato, Gianni  
 His mother him has always appreciated Gianni  
 'His mother him has always appreciated him, Gianni.'
- b. \*L' ho cercato senza trovare pg, quell libro  
 it have searched without finding, this book  
 '\* I have searched it without finding, this book.'

Italian ([Frascarelli 2004](#): p.101-102)

#### 4.4.3 Monoclausal approaches to right dislocation: reevaluation

In this section, I will highlight some problems which are rooted in the monoclausal approach to right dislocation; i.e. the fact that there is a derivational link between the dXP and its associated clitic. First, I take up base-generation approaches, where it is assumed that the dislocated phrase is externally merged in a peripheral position, and show that some diagnostics proposed to argue for this option are flawed. Then, I will turn to movement approaches, where it is argued that the relation between the dXP and its corresponding clitic can be imputed to syntactic movement, and identify their inadequacies with respect to the derivation of Arabic right dislocation.

##### 4.4.3.1 Base-generation analysis

Base-generation approaches must say something about the reason why the dXP comes to covary with the clitic in terms of morphological case and theta-assignment. On the assumption that syntactic connectedness is amenable to a movement analysis ([Anagnostopoulou 1997](#): p.152), it is quite unlikely thus



that this fact can receive a principled explanation via a base-generation account.

A particularly problematic aspect in the monoclausal approaches is their firm tendency to take some diagnostics for granted.<sup>43</sup> To begin with, the proposal taking the absence of WCO effects as an argument against movement is not without shortcomings. First, the absence of WCO effects observed in dislocation constructions has been independently referred to as “weakest crossover” by Lasnik and Stowell (1991). In particular, these authors maintain that WCO effects arise only by movement of what they call “true quantifiers”, i.e., *wh*-phrase, quantifiers etc., because only these elements can undergo QR at LF creating operator-variable chains. Of crucial importance here is that dXPs in a topic-comment articulation are not true quantifiers and hence their spell-out copy is not a bonafide variable.<sup>44</sup> As shown earlier, Arabic CLLD I is insensitive to WCO effects, but this does not entail necessarily that there is no movement involved in the derivation since WCO effects are not predicted to evince in the first place. Second, WCO effects are not a trustworthy test for the (non)movement approach to dislocation since speakers display a high degree of variability in judging WCO examples. One case in point is WCO effects in restrictive clauses as in (97,98), taken from Eilam (2011: p. 130).

(97) The man [ $\text{who}_i$   $t_i$  killed [his mother]] was denied parole.

(98) ??The man [ $\text{who}_i$ [his mother] killed  $t_i$ ] was put to rest.

<sup>43</sup>Although these diagnostics such as WCO effects and parasitic gaps licensing are still areas of controversy and clashing views in the monoclausal literature, their absence in the realm of CLLD I and CLRD in MSA will receive a principled explanation by recourse to an ellipsis-based analysis, as will be shown in section 5.3.2.2

<sup>44</sup>In a critical analysis of Lasnik and Stowell (1991), Postal (1993: p.554) argues that “WCO effects are even more mysterious than they might have seemed previously”. As such, he provides evidence that WCO effects are not tied to the construction type, but rather to the operator type. In particular, *contra* Lasnik and Stowell’s claim that topicalization with quantificational phrases are impossible, Postal argues, instead, that this construction is possible if the moved DP is modified by an exceptive (for example *anyone else*), a relative (for example *anyone who was sick*) or an adjective phrase (for example *somebody taller and thinner than you*). Consider the example (a) involving an exceptive phrase. Crucially, the moved phrase in this construction is indeed a true quantifier and gives rise to WCO effects as (b) shows. The following examples are taken from Postal (1993).

- a.  $\text{Anyone}_i$  else/but Bob/other than her they would have fired  $t_i$
- b. \*Everybody $_i$  else, I told his $_i$  wife that I had called  $t_i$ .

What this means is that topicalization does still give rise to WCO effects if conditions are controlled for. For a recent and in-depth discussion of WCO, the reader is referred to Safir (2017).



In particular, [Chomsky \(1982\)](#) considers (98), a characteristic of WCO effects, an acceptable sentence *recanting* from his judgment put forth in [Chomsky \(1976\)](#), that restrictive clause configurations do display WCO effects, and hence they should be judged unacceptable. Thus, taking WCO for granted will fall short of accounting for inter-speaker variability of this kind.

Third, WCO effects are so delicate evidence for the (non)movement approach to dislocation. This can be imputed to reasons having to do with “a lack of understanding of the phenomenon” ([López 2009](#): p.227).<sup>45</sup> Indeed, this can be verified by the vast literature devoted to analyzing this phenomenon. In particular, [Chomsky \(1976\)](#) for instance tries to derive WCO from a linear condition which is referred to as the ‘Leftness Condition’ according to which “a variable cannot be the antecedent of a pronoun to its left” ([Chomsky 1976](#): p.342). This is exemplified in (99) where the trace left by movement is preceded by a pronoun giving rise to WCO effects.

(99) ?Who<sub>i</sub> do her parents love t<sub>i</sub> ?

But, this condition is abandoned because it is so strong that it excludes fully grammatical sentences as shown in (100) and (101) where the pronoun can precede the trace to its right at LF.

(100) Seeing his father pleased every boy.  
 LF:[every boy]<sub>i</sub> seeing his father pleased t<sub>i</sub>  
[Higginbotham \(1980](#): p. 688)

(101) For his birthday, each of the employees got a Mercedes.  
 LF: [each of the employees]<sub>i</sub> for his birthday t<sub>i</sub> got a Mercedes  
[Reinhart \(1983](#): p.129)

Another attempt to derive WCO effects can be found in Koopman and Sportiche’s ([1983](#)) The Bijection Principle according to which an operator must bind only one variable and a variable must be bound only by one operator. The variable is understood here as an element which is in (A)argument position and is locally A’-bound. Interestingly, this principle can account for the deviant string of words as exemplified in (102).

<sup>45</sup>According to [Eilam \(2011](#): p.128), WCO effect is information-structural in nature. That is, WCO effects arise because “an operator must be a topic in order to scope higher than its surface structure position”, adding that “this articulation is absent from examples of WCO, explaining why the operator does not scope over, and hence does not bind, the pronoun”. To the extent that this proposal is on the right track, WCO effect is not a syntactic phenomenon *per se*, and hence can receive a straightforward explanation in pragmatic/discursive terms.

(102) ?Who<sub>i</sub> do her<sub>i</sub> parents dislike t<sub>i</sub>?

The example in (102) is unacceptable since it does violate the Bijection Principle in that one operator in A-bar position ( i.e. *who*) binds two variables in A-position ( i.e. the possessive pronoun and the trace), and hence WCO is accounted for. Notwithstanding its merit, the Bijection principle is not exhaustive enough to account for data where operators are shown to bind two variables as in (103) across-the-board (ATB), and (104) parasitic gaps (Safir 1984: p. 609).

(103) I know who<sub>i</sub> [John likes t<sub>i</sub> ] and [Mary hates t<sub>i</sub> ].

(104) [Which report]<sub>i</sub> [did you [file t<sub>i</sub>] [without reading t<sub>i</sub>]]?

The common denominator thus is that the operator in these cases binds two variables, rendering the Bijection Principle limited in terms of empirical coverage. At any rate, it is beyond the scope of this thesis to go into the specifics of analyses proposed in the literature to account for WCO since this will take us too far afield. It suffices to say at this point that WCO is still an ill-understood phenomenon and this has been given a blind eye in the monoclausal literature on dislocation, giving rise to analyses arguing exclusively for either movement or base-generation.

Second, another test employed in the literature to argue for a base-generation analysis of dislocation is that dislocation never licenses parasitic gaps (PGs), a hallmark of A-bar movement (Richards 2014). Indeed, Cinque (1990: p.62) excludes a *wh*-movement approach to the derivation of Italian CLLD I because this configuration does not license PGs as in (105).

(105) \*Gianni l'ho cercato per mesi, senza trovare e  
Gianni I have looked for for months without finding

In (105), the sentence is judged ungrammatical since PGs, labelled here as 'e', are impossible in a CLLD I configuration and hence this is taken as an argument against movement. Conversely though, Samek-Lodovici (2015: p.124) reports an instance of CLLD I which appears to license PGs in Italian as exemplified in (106a). The same holds true for CLRD as noted by Fernández-Sánchez (2017: p.33), shown in (106b) (parasitic gaps below are labeled as italicized *pg*').

(106) a. Il tuo cane, l' ha cercato per mesi senza mai  
The your dog, it has sought for months without ever  
trovare *pg* MARIA, (non la polizia)!  
to find, Maria (not the police)

'Your dog, MARY sought it for months without ever finding it (not the police)!'

- b. l'ha cercato per mesi senza mai trovare *pg* Maria,  
it has sought for months without ever to find MARIA,  
Il tuo cane (non la polizia)  
the your dog (not the police)

As for PG licensing in the context of MSA, PGs in are not licensed under resumption in the context of dislocation, as shown earlier.<sup>46</sup>

#### 4.4.3.2 Movement analysis

Movement approaches must provide the rationale for why no real gap is found in the clause. As far back as [Chomsky \(1977\)](#), syntactic movement is taken to display the following properties:

- a. Movement leaves a gap.
- b. It observes the Complex NP Constraint.
- c. It observes the Adjunct Island Constraint.
- d. It observes the Subject Island Constraint. [Aoun and Li \(2003: p.1\)](#)

A possible solution to this is to assume that there is some sort of derivational link between the dXP and its associated clitic either via resumption ([Demirdache 1991, 1997](#)), agreement ([Borer 1984](#)) or clitic doubling i.e., Big DP ([Cecchetto 1999; Samek-Lodovici 2006](#)). None of these analytic options, however, is tenable. This will be shown in section 5.4, where I argue that there is no derivational link between the dXP and its associated clitic. Moreover, the prosodic independence of the dXPs as shown earlier is another problematic issue for movement approaches to dislocation. Barring *ad hoc* stipulations, the question is how the non-integrated nature of dXP can be handled prosodically in line with a pure movement analysis? Once again, this question will be taken care of in section 6.3.

---

<sup>46</sup>This is still a topic of controversy, though. As noted in [Soltan \(1996: p.247\)](#), MSA does not entertain this construction. In particular, in his discussion on parasitic gaps in Arabic relative clauses, he maintains that "(c)lear judgments as to their grammaticality [PGs] are not easy to formulate, given that there is hardly any work on this issue in Arabic traditional grammar ...". [Wahba \(1995: p.59f\)](#), on the other hand, argues that Standard Arabic DOES have PGs, which can be licensed by an A'-bound resumptive pronoun in *wh*-questions. Apart from the presence of PGs in Arabic or the absence thereof, what is crucial is that PGs in the context of Arabic dislocation is not possible as noted in the main text.

#### 4.4.3.3 Right dislocation: remnant movement

Apart from this, the pressing question is how to derive the word order for right dislocation via syntactic movement. As far back as Kayne's (1994) LCA, rightward movement has been taken to be a questionable operation; but see contributors to Beermann et al. (1997) for an alternative view.<sup>47</sup> One possible analysis to go about this ban on rightward movement is to assume that the dXP undergoes a dual movement: (i) the dXP undergoes movement to the specifier of TOP-head, and then (ii) the entire remnant IP undergoes inversion to a higher position (i.e. IP inversion). This is exemplified in (107,108), taken from Samek-Lodovici (2006: p.840).<sup>48</sup>

(107) L' ho visto, Gianni  
him have seen, John  
'I saw John.'

(108) a. [TOPIC Gianni<sub>i</sub>] [IP l'ho Visto t<sub>i</sub>]  
b. [XP [IP l'ho Visto<sub>i</sub>]<sub>k</sub>] [TopP Gianni<sub>i</sub> t<sub>k</sub>]

Although such a remnant movement derives the correct word order, one suspects that its rationale is merely to mimic the illusory rightward movement in conformity of Kayne's LCA. As it stands, this analysis does not provide evidence for why these movement operations are licit in the first place. As far back as Chomsky (1995), internal merge is taken to be a costly operation and thereby it must be 'triggered' by the checking of potential features (i.e. formal, semantic, pragmatic etc.). One way to account for this is to assume that there is indeed a trigger for this movement. In particular, building on Frascarelli and Hinterhölzl (2007), Frascarelli and Ramaglia (2013: p.116f) propose that topics can be decomposed into various projections along the left periphery of the clause as illustrated in (109).

(109) [ForceP [ShiftP [GroundP [ContrastP [FocusP [FamiliarP [FinP ]]]]]]]

According to Frascarelli and Ramaglia, the right dXP is maintained to move to the SPEC-FamiliarP, and the remnant IP targets the GroundP, a projection proposed originally by Poletto and Pollock (2004) to be a hub for backgrounded

<sup>47</sup>Interestingly, the prohibition against rightward movement is assumed even by authors who argue, contra Kayne's LCA, in favor of rightward adjunction (Manzini 1994; Abels and Neeleman 2009). As it stands, this entails that rightward movement is taken to be more marked theoretically than rightward adjunction.

<sup>48</sup>This analysis is originally proposed by Cecchetto (1999), who in turn attributes it to Kayne's (1995) class lectures at Harvard university.

elements (i.e. unfocused materials). This is, however, problematic for the reason that the moved phrase is indeed focused (i.e. IP) and hence it is quite unlikely to target a topic position; see Brunetti (2003, 2004). Further, this analysis is problematic for the derivation of clitic right dislocation in Arabic as well. Recall that I argued in chapter 3 that the right dXP in Arabic is best analyzed as being contrastive focus (i.e. or ‘identificational focus’) after Kiss (1998). If one assumes the ‘split-topics’ depicted in (109), it is difficult then to propose for example that the right dXP would target the FamiliarP for the simple reason that the nature of contrastive focus is not compatible with familiarity; see Pesetsky (1987) on the nature of familiarity from an information-structural perspective.

One further option is that the Arabic right dXP moves to FocusP, but this is untenable either since FocusP in (110) is reserved to elements denoting new information, which are at odds with the discursive properties of contrastive (identificational) focus. Indeed, this is even more problematic for Arabic given that IP in Arabic can host either new information or contrastive focus. Interestingly, these discursive properties are not marked formally, but it depends for interpretation on the speaker and the hearer common ground. By way of illustration, consider the example in (110).

- (110)    maḏa faʿalta bi-alkutubi?  
           What did        with the books  
           ‘what have you done with the books?’  
       a.    ?ahdytu-ha li muhammed-en,    alkutub-a  
               gave-it        to MUHAMMED-GEN, the books-ACC  
               ‘I gave the books to Muhammed as a gift’.

The proper name ‘*Muhammed*’ can be interpreted discursively as being either new focus or contrastive focus depending essentially on the informative assumptions shared by the hearer and the speaker. As an illustration, suppose that the questioner in (110) does not know to whom the books were given. In this context, the questionee’s answer in (110a) is interpreted as new focus which can be uttered out of the blue. Under a possible contrastive reading, however, the questionee singles out one referent (‘*Muhammed*’ in this context) among many alternatives (i.e. subset of entities) which are essentially known to the questioner. Turing back to the ‘split-topics’ in (109), it is unclear how the Arabic data of the sort depicted in (110) can be accommodated. Specifically, given the fact that the cascade of projections proposed by Frascarelli and Hinterhölzl (2007) does not provide a landing site for contrastive focus, this discursive property will be left unaccounted for. Even worse, the right-dXP in

Arabic as hinted earlier denotes contrastive focus and hence the postulation of two landing sites for contrastive focus (i.e. one for the element embedded in IP and the other for the right-dXP) seems to be at odds with the proposal of [Frascarelli and Hinterhölzl](#).

That the trigger for remnant movement is still a pebble in the shoe in the literature gives rise to further reductionist proposals arguing that there should not be even a trigger for this kind of movement. An analysis along these lines has been pursued in [Cecchetto and Donati \(2015\)](#). In particular, building on Chomsky's (2008: p.137) claim that merge, be it external or internal, is a cost-less operation applying freely, Cecchetto and Donati interpret this by proposing that merge can apply without a label (i.e. unprobed operation). They further claim that 'unprobed merge' targets only root clauses and hence "when a structure is not embedded and is complete, it needs no label" ([Cecchetto and Donati 2015](#): p.284). What is relevant is that if the remnant movement needs no label (i.e. unprobed), this operation must apply then to root clauses. The immediate objection to this proposal, though, is the fact that right dislocation in Arabic can occur in embedded clauses. This is illustrated in (111).

- (111)    ʕandama rayatu-ha, ʕani     al-suhub-a,     ʕudtu     li  
           when     saw-them, I mean, the-cloud-ACC, returned to  
           al-byat-i  
           the-house-GEN  
           'When I saw the clouds, I returned home.'

In fact, [Cecchetto and Donati](#) deduce evidence in favor of the unprobed remnant movement on the basis of the behavior of right dislocation in two head-final languages: Turkish ([Kural 1997](#)) and Japanese ([Tanaka 2001](#)). In particular, they note that these languages share the common property that right dislocation targets only root clauses to the exclusion of embedded clauses. A consequence of this is that unprobed remnant movement "in particular applies to right dislocation in head-final languages" (ibid:302). Unfortunately though, this can be confounded easily by saying that right dislocation is a grammatical mechanism, which is highly productive in head-initial languages such as Arabic ([Johannessen 1996](#)).

In the last paragraph of their article, [Cecchetto and Donati](#) sum up succinctly the rationale for remnant movement. They write:

in today's theorizing remnant movement plays a much bigger role, since it is used as an intermediate step, as opposed to the final step, of a given derivation in many cases. For these uses we still think

that either the issue of trigger identification is taken seriously or remnant movement becomes a dangerous move, because it suspiciously looks as an *ad hoc device*. (italics mine).

Given the abovementioned observations, I indeed align myself with the second part of [Cecchetto and Donati](#)'s conclusion that remnant movement is merely a stipulation which is proposed in the right dislocation literature to rescue Kayne's (1994) LCA. Given the fact that discussion of [Kayne](#)'s proposal in its entirety would take us too far afield, I would be obliged to leave the matter at that. Pending further work showing how remnant movement can be accommodated in the light of the observations alluded to earlier, remnant movement does not seem to be a tenable option for the derivation of clitic right dislocation in Arabic, and indeed for other languages as well; see [De Cat](#) (2007); [López](#) (2009).

## 4.5 Residual issues: templatic approach to the left periphery

As is well-known within generative circles, the internal structure of some clausal domains has been split into various projections to account for some emerging data which are thought to be only accommodated under rigorous conceptualization. As [Adger et al.](#) (2004: p.10) note, the extended formulations of the clause structure can be reducible to three different types. At the outset, Larson's (1988) analysis of the multiple object construction ushers in an era of extended projections in linguistic theory, where it is argued that some syntactic and possibly semantic glitches can be resolved if one assumes a split system with two separate heads of the VP clausal domain. Similarly, [Pollack](#) (1989) maintains, based originally on data from French, that the IP should not be a single entity but rather divided into a number of heads, each one of which bears some grammatically relevant features such as tense and agreement. Then comes the third wave of extended articulations of clausal domains with the works of Rizzi's (1997) seminal paper along with the adverbial heads of Cinque (1999). In what follows, I focus on the third wave, which is known as 'the cartography approach' in the literature.



### 4.5.1 Rizzi's (1997) Split CP: cascade of projections in the left periphery

Luigi Rizzi's (1997) *The Fine Structure of the Left Periphery* constitutes arguably the first theoretical attempt to revisit the clausal layer which appears above TP (i.e. The (C)omplemenizer (P)hrase, CP).<sup>49</sup> The central claim of this approach is that elements bearing information-structural features tend to occupy a position in the left periphery of the clause, and that these elements appear in a fixed cascade. As it stands, this cascade will account for the appearance of these elements at the left periphery by assuming that the relevant elements undergo movement to a dedicated position in the left periphery from an IP-internal position. Further, this approach is highly restrictive since it assumes that there is a "one-to-one relation between position and interpretation" (Cinque 1999: p.132). According to Rizzi, the new CP architecture is assumed to take the following representation.

$$(112) \quad [_{\text{ForceP}} [_{\text{TopP}} [_{\text{FocP}} [_{\text{TopP}} [_{\text{FinP}} [_{\text{IP}} ] ] ] ] ] ] ]$$

As per this strictly defined hierarchy, the number as well as the order of functional projections are argued to be universal. The CP is therefore decomposed into different projections starting with ForP, which marks the illocutionary force of the sentence. Then comes FocusP, which is sandwiched between two Topic projections. At the end of this cascade, there is a FinP layer encoding the finiteness and non-finiteness of the sentence. Crucially, subsequent works have made changes and modifications to this hierarchy, but this is taken to be the baseline representation of the cartography program. With the advent of Minimalism (Chomsky 1995: onwards), movement operations are constrained by morphological necessity, which means that movement is illicit without there being a justifiable trigger. On the basis of constraints like these, IS notions are not derived via movement randomly but instead functional heads with respect to discourse-related elements must bear uninterpretable features which are in need of checking. In fact, the cartographic approach employs a theory of feature movement to derive IS notions in a head-Spec configuration. More specifically, the encoding process of IS notions within the cartographic works (Rizzi

<sup>49</sup>According to Newmeyer (2009: p.115), "(t)he cartography program has its root in pre-minimalist work. For example, Banfield (1973) suggested that the node S is dominated by the node E(xpression), thereby providing for the generation of a variety of discourse types, and in Chomsky (1977) we find what I believe to be the first appearance of a Topic node dominating S'." This is in consonance with Fominyam and Šimík (2017)'s observation that Rizzi's work has substantial predecessors, e.g., Laka (1990) and Brody (1995) a.o.



1997: et seg.) is carried out via associating features, [TOP] and [Foci] for example, with their functional projections, TopicP and FocusP respectively. These features are morphosyntactic features which attract relevant constituents for feature checking. The rationale behind this move is reflected in the Inclusiveness Condition (Chomsky 1995: p.225) which forbids introducing new features to the course of derivation; that is, the role of narrow syntax at this point is to rearrange lexical features taken from lexicon (via internal merge or movement, in usual usage). More on this below.

#### 4.5.2 Shlonsky (2000): Split-CP in Arabic

This cartographic approach to the left periphery is now widely accepted and has been applied to a number of languages including Arabic (Ouhalla 1997; Aoun and Benmamoun 1998; Ouhalla and Shlonsky 2002). For instance, Shlonsky (2000) proposes a split CP analysis of the left periphery as shown in (112), the canonical CP being divided into distinct projections denoting discursive properties. Building on Bakir (1980), Shlonsky assumes that Arabic provides a direct support for the cartography program since it displays a partial cascade of functional projections in the left periphery. Specifically, if topic and focus are realized in the sentence, the topic obligatorily precedes the focal element. This is exemplified in (113-114).

- (113) faatimat-u l-wardat-a ?taa-ha saalim-un.  
Fatima-NOM the-flower-ACC gave.3FEM.SG Salim-NOM  
'It is a flower that to Fatima, Salim gave.'

- (114) \*?al-wardat-a faatimat-u ?taa-ha saalim-un.  
the-flower-ACC Fatima-NOM gave.3FEM.SG Salim-NOM  
'It is a flower that to Fatima, Salim gave.'

Moreover, focal elements are argued to be incompatible with *wh*-phrases in Standard Arabic as exemplified in (115-116).

- (115) ayna qaabala xaalid-un saalim-an?  
where met.3SG Khalid-NOM Salim-ACC  
'Where did Khalid meet Salim?'

- (116) \*ayna saalim-an qaabala xaalid-un?  
where Salim-ACC met.3SG Khalid-NOM  
'Where was it Salim that Khalid met?'

The explanation for this incompatibility points to the uniqueness of FP in the

cartographic templates in that only one focal element can be realized in the sentence. This is attributed to the claim that a *wh*-phrase is “a subclass of focalization and a focus cannot be embedded under another focus” (Shlonsky 2000: p.330).<sup>50</sup>

### 4.5.3 Problems for the Cartography program

Despite the fact that it is widely adopted, and indeed its wide currency cannot be ignored, the cartographic approach has been challenged, rightly I believe, on numerous grounds. Although the current discussion is not a case study against the cartography program in its entirety, three critical comments are in order.<sup>5152</sup>

The first problem with the cartography program is a theory-internal one, that is, it is merely an *ad hoc* approach to the syntax of the left periphery, which does not “explain the grammatical behavior, but simply provide names for it” (Emonds 2004: p.75). In other words, cartography practitioners restate empirical facts in a hierarchical template, but without giving the reason why ForceP for example must dominate the other projections not the other way round?

---

<sup>50</sup>Crucially, Shlonsky (2000) does not discuss CLLD *per se*, but his paper is concerned with arguing for a designated position for topics in Arabic.

<sup>51</sup>For a thorough critique for the cartography program, the reader is referred to contributors to Van Craenenbroeck (2009)’s *Alternatives to Cartography*; Newmeyer (2009); Pereltsvaig (2004), among many others.

<sup>52</sup>The question which may arise is: how and where IS notions are encoded then? To the best of my knowledge, the most explicit treatment of the idea that discourse notions are orthogonal to narrow syntax is Horvath (2010)’s The Strong Modularity Hypothesis depicted in (a).

- a. *The Strong Modularity Hypothesis for Discourse Features*  
No information structure notions – i.e., purely discourse-related notions – can be encoded in the grammar as formal features; hence no “discourse-related features” are present in the syntactic derivation. They are available only outside the CHL [the computational system of human language = narrow syntax] (Horvath 2010: 1349).

A promising approach can be seen in Lambrecht (1994: 290), which assumes that IS is an instantiation of cognitive processes taking inferential reasoning as a point of departure. As such, contrast is argued to “arise(s) from particular inferences which we draw on the basis of given conversational contexts”, and hence it is not encoded syntactically, or in Lambrecht’s words “lexicogrammatically”.

(Ott 2015).<sup>53</sup> Moreover, it is unclear how this multiplication of projections as per the cartography program can be accommodated with the widely-held assumption that language is economical and has an optimal design.<sup>54</sup> More recently, Chomsky et al. (2019: p. 205f) call into question the cartography program on the ground of its incompatibility with conditions of acquirability and evolvability, which are argued to be rooted in Universal Grammar (UG). As such, the cartographic approach does not meet these two criteria since there is no conclusive piece of evidence that the child learns such a complex template based mainly on experience. Further, extended projections do not seem to mesh well with the evolutionary account on the assumption that UG must have evolved recently: “it seems virtually unimaginable that the complex cartographic templates could have evolved as irreducible properties of UG”. Indeed, this state of affairs has been acknowledged by Cinque and Rizzi themselves (2010: 62-63). They write:

One important question which arises is: where does the hierarchy, and its universal properties, come from? It is hard to imagine that the hierarchy may be an irreducible property of UG, disconnected from any other aspect of human cognition; it is also hard to believe that the hierarchy may be a purely arbitrary “cultural” property,

---

<sup>53</sup>Abels (2012) for example argues that the cascade of functional projections assumed for the Italian left periphery can be derived from independently motivated principles related to the locality of movement. The original observation is that strict orderings observed by Rizzi in Italian is a direct consequence of locality conditions which are rooted in Relativized Minimality. For example, relative operators can undergo movement across topics; by contrast, topics cannot undergo movement across relative operators (Rizzi 1997: 289). Under the analysis of Abels, this asymmetry can be explained by recourse to Relativized Minimality. To the extent that Abels’ proposal is on the right track, this means that movement is not pre-determined since information structural categories under this analysis do not target pre-established landing sites. Thus, it is the job of Relativized Minimality to ban unattested orders.

<sup>54</sup>Interestingly, it seems that the question of parsimony constitutes so serious a challenge to cartography practitioners that the metaphorical analogy appears to speak louder than a real scientific argumentation. An interesting case in point is Benincà and Munaro (2011: p.5), where it is argued that the tension between minimalism and the cartography program is only apparent. To show that this is the case, the authors resort to a *biological* analogy. They write:

If we take biology, for example, we see that surrogate elements in many cases ensure the survival of injured bodies, as an effect of a sort of redundancy of the living organisms. Organisms, though, are not built as they are in order to be equipped to supply spare parts when necessary; they simply are very rich and sophisticated, and if something is damaged, the whole of the organism in many cases makes up for the malfunctioning of a sub-part. For example, we do not have two hands in order to have a spare one if one of them is injured—hands are two for very complex, independent reasons; yet, if one of them does not work, we are able to manage and learn how to use the other and partly offset the functions of the lost one, as is the case for a spare tire.

rediscovered by every language learner in the same form, language after language, on the basis of pure inductive learning.

Even worse, the subsequent changes and modifications which followed Rizzi's original proposal of the split-CP hypothesis keep multiplying the possible projections occurring in the left periphery either by proposing completely different projections or postulating multiple projections of the already existing one. For example, Rizzi (2004) proposes an Int projection to account for the appearance of interrogatives in the left periphery. Similarly, Poletto and Pollock (2004) proposes a Ground projection for some backgrounded (i.e. unfocused) elements, and Belletti (2001) proposes more than one FocP to accommodate the observed types of focus, e.g. contrastive focus, *wh*-elements etc. Further, Frascarelli and Hinterhölzl (2007) assume that one landing site for topics is not enough, and hence they assume a cascade of projections to host different types of topics. As it stands, the enrichment of UG with unlimited numbers of projections is indeed a questionable matter if one still remains faithful to the minimalist desiderata, and crucially to scientific reasoning *in toto*, which aspires to provide cogent explanations for phenomena with as little analytic mechanisms as possible (cf. Occam's razor).<sup>55</sup>

A second problem related to the cartography program is the fact that it undergenerates: it is not exhaustive enough to accommodate data from a cross-linguistic perspective.<sup>56</sup> For example, focus in MSA can occur in clause-final, clause-internal, and clause-initial position.

- (117)    hal aʕtyita al-faiz-a            syarat-an?  
           Q    give    the-winner-ACC car-ACC  
           'did you give the winner a car'
- a.    Laa. Aʕtyitu alfaiza                    **BAYTA-AN**  
        No. (I) gave the winner-ACC house-ACC  
        'No. I gave the winner a house'
- b.    Laa. Aʕtyitu **BAYTA-AN** li alfaizi  
        No. (I) gave house-ACC to the winner-GEN  
        'No I gave the winner a house'
- c.    Laa. **BAYTA-AN** Aʕtyitu alfaiza  
        No    house-ACC (I) gave the winner-ACC  
        'No. I gave the winner a house.'

<sup>55</sup>In a recent estimation, the number of functional projections reaches four hundred (Van Craenenbroeck 2009: p.4).

<sup>56</sup>See also Neeleman et al. (2009) and Bakir (2011) for a proposal arguing that the cartography program suffers from an undergeneration problem in that it falls short of accounting for data from Dutch and Iraqi Arabic respectively.

One way to incorporate such data into the cartography template is to allow FocP to be an ‘everywhere’ process which can be merged anywhere in the functional skeleton. This move, however, runs counter to one of the core assumptions of the cartography program: there is a one-to-one relation between interpretation and syntactic position. As it stands, the data in (117) reveals that the relation between interpretive effect and syntactic position can be indeed one-to-many. This is evident from the fact the FocP does not have a designated position in Arabic contrary to the assumptions of the supporters of the split-CP analysis.

The last but not the least problem for the cartography program comes from movement.<sup>57</sup> According to this approach to the left periphery, movement is a *sine qua non* condition for deriving the properties of information-structural elements: each functional head is endowed with an uninterpretable morphosyntactic feature (i.e. TOP-feature for instance), which must be checked off during the derivation. In so doing, the head attracts phrases with a matching/agreeing feature to its specifier in a run-of-the mill SPEC-Head configuration (Van Craenenbroeck 2009). However, as pointed out by Neeleman and Szendrői (2004: 154) among others, lexical elements are not drawn from the Lexicon specified inherently for topichood or focushood, and hence focus and topics features must have been inserted at some point of derivation; a state of affairs which eventually gives rise to a violation of Inclusiveness Condition (see above). One way to go about this condition is to assume that information-structural features are in fact part of the Numeration. This line of thought has been indeed pursued for example by Aboh (2010) in an article whose title is self-explanatory: *Information Structuring Begins with the Numeration*. This claim is not innocuous, though, since it depends on what kind of elements one has in mind (i.e. phrasal vs. non-phrasal), which could participate in the combinatorial composition of relevant information-structural categories. This concern connects to a broader problem related to the Cartography program *in toto*: information-structural elements are taken to be morphosyntactic features which drive movement and target a designated position in the structure. As far back as Lambrecht (1994: 215), information structure is concerned with phrasal cat-

<sup>57</sup>A potentially problematic aspect of the Cartography program is the claim that information-structural categories are optional. According to Rizzi (1997: 288), “it is reasonable to assume that the topic-focus system is present in a structure only if ‘needed’, i.e. when a constituent bears topic or focus features to be sanctioned by a Spec-head criterion.” Contrary to Rizzi, information-structural categories are not optional, since the flow of information in a discourse context denotes either old info or new info. It is quite unlikely thus to assume that information-structural categories are optional as this runs counter to the discursive system of language. According to Eilam (2011: p.234), “(n)ot only does every sentence have an IS articulation, but every element of the sentence is mapped onto an IS category”.

egories NOT lexical items. He writes:

information structure is not concerned with words and their meanings, nor with the relations between the meanings of words and those of phrases or sentences, but with the pragmatic construal of the relations between entities and states of affairs in given discourse situations. Entities and states of affairs are syntactically expressed in phrasal categories, not in lexical items.

Given the fact that information-structure is encoded in phrasal elements not lexical items, the proposal according to which IS categories are part of the Numeration would have to stipulate that phrases are part of the Numeration as well. As it stands, this in fact runs counter to the mainstream assumption that the Numeration is responsible for generating lexical items, to the exclusion of phrases, which are generated at the syntax proper; see also [Eilam \(2011\)](#) for a view along these lines. Even if an *ad hoc* treatment is put forth to go about this condition, there is still cogent reason casting doubts on the validity of the movement approach to information-structural elements. Specifically, as shown earlier, CLLD I is still amenable to a base-generation account given the fact that it does not give rise to WCO effects nor licenses PGs, in addition to the fact that the dXP in CLLD I articulation forms an intonational phrase on its own. Taken together, it is quite unlikely to deal with such facts in a framework which presupposes a pre-determined movement operation to derive the relevant elements.

## 4.6 Taking stock

In this chapter I have discussed a subset of proposals in relation to CLLD I and CLRD I. The common denominator of these proposals is that they are mon-clausal: the dXP and its associated clitic appear in the same clause. One of the main problems which has preoccupied researchers over the years is what is known in the dislocation literature as 'Cinque's paradox': the fact that the CLLD I and CLRD I can show properties of movement and base-generation at the same time. In other words, CLLD I and CLRD I "show(s) properties of movement while defying a straightforward movement analysis" ([Ott 2015: 233](#)). A prominent case in point is [Cinque \(1990\)](#), where it is argued that CLLD I cannot be derived by movement since CLLD I does not license parasitic gaps, nor does it leave a gap after movement, among other properties; nonetheless,



CLLD I is sensitive to islands. To go about this conundrum, Cinque chooses to tackle this conundrum directly by assuming an intermediary theoretical mechanism termed Binding Chain to account for this schizophrenic behavior of CLLD I. As shown earlier, this treatment is not without shortcomings, though. On the other hand, Iatridou (1995) approaches Cinque's proposal by proposing explicitly that base-generation and movement are analytical options with distinct properties which should be reserved, contrary to postulating stipulative constructs such as Binding Chain. Despite the plausible rationale behind her analysis, Iatridou's proposal is confounded by the 'redundancy' problem, which should be dispensed with for any analysis aspiring to be simple and natural. Moreover, as argued by Alexopoulou (1999), Iatridou's proposal does not hold water given that there is empirical evidence from Modern Greek militating against Iatridou's conclusion. Demirdache (1991, 1997) puts forth a non-orthodox proposal, where it is argued that the clitic, instead of the dXP, undergoes movement at LF. But this proposal, attractive as it may be at first sight, has to face conceptual as well as empirical problems. Within the Arabic context, it seems that the Cinque's paradox is not noticed much in the literature on Arabic. This is evidenced from the fact that the three seminal works on Arabic dislocation discussed earlier remain silent on Cinque's Paradox. Alternatively, Ouhalla (1994a, 1997) for example argues for an external merge account for Arabic CLLD I. Conversely, Shlonsky (2000) proposes a templatic/cartographic approach to the left periphery in Arabic where it is argued that the dXP targets a pre-determined landing site via syntactic movement. Aoun and Benmamoun (1998) take a middle position in that Arabic can be derived by base-generation in addition to a movement dependency, which is assumed to occur in the PF component in the grammar. Interestingly, none of these approaches provide a cogent treatment for Cinque's paradox, and hence they are rejected on either conceptual or empirical grounds.

As far as CLRD I is concerned, the same problems attested for CLLD I are reproduced in varying degrees. That is, movement and base-generation are involved. However, neither movement nor base-generation accounts seem to mesh well with Arabic dislocation. Although Kayne (1994) claims that right-dislocation is a class of clitic doubling, where the dXP is dislocated at LF, this move is confounded by data from Arabic and other languages. The question which arises then: *what is to be done?* The answer to this question will be the topic of the next chapter where I propose that CLLD I and CLRD I in MSA will receive a better and principled analysis by recourse to a strictly biclausal

account.



## Chapter 5

# It is a Double Clause *indeed* ! – The Biclausal Analysis

### 5.1 Introduction

A conspicuous aspect of CLLD I and CLRD I in MSA is that they show mixed properties with respect to the (non-)movement status of the dXP. On the one hand, the dXP behaves as if it was independent in that it does not show any syntactic sign that it belongs to the host clause (the absence of Weak Crossover effects, the failure of licensing parasitic gaps etc.). On the other hand, the dXP sometimes shows connectivity effects giving rise to the impression that it does belong to the host clause at some point in the derivation. In short, Arabic dislocation shows “schizophrenic” symptoms in the sense of [Ott and De Vries \(2014\)](#) and also displays “Cinque’s paradox” in the sense of [Iatridou \(1995\)](#). Accordingly, this state of affairs crucially defies any analysis wishing to boil down the phenomenology of dislocation to either internal merge (i.e. movement) or external merge (i.e. base-generation). In what follows, I will examine a novel approach to CLLD I and CLRD I in MSA, which is rooted in the assumption that dislocation should be understood as a bi-clausal configuration, whereby the dXP belongs to an inaudible root clause which is deleted at PF.

The proposed analysis of CLLD I and CLRD I which I defend here is not without history. According to [Tanaka \(2001\)](#), the biclausal approach was initially proposed by [Kuno \(1978\)](#) in his analysis of Japanese right dislocation, and it was further developed by [Abe \(2004\)](#), [Takita \(2014\)](#) and [Tanaka \(2001\)](#) a.o. This analysis in turn has been applied to Korean by [Park and Kim \(2009\)](#) and [Yim \(2013\)](#).

Although these works argue for a biclausal analysis of dislocation construc-

tions, it is Dennis Ott and Mark De Vries who provide the most comprehensive version of the biclausal analysis in multiple works, drawing mainly from Germanic languages (Ott and De Vries 2012, 2014; Ott 2015; Ott and De Vries 2016; De Vries 2013). More recently, Fernández-Sánchez (2017, 2020) argues for a biclausal analysis of right dislocation in Romance languages. Due to the fact that these works are the most complete versions of the biclausal narrative, this chapter is based on them. To my knowledge, this thesis is the first endeavour to present a thorough treatment of CLLD I and CLRD I in MSA from a biclausal perspective. Since the biclausal analysis has not gained wide currency in the Arabic literature, this thesis is hence intended to fill this lacuna.

The rest of this chapter is divided into six sections. In section 5.2, I discuss one of the main tenets of the biclausal analysis: the assumption that the dXPs partaking in the derivation of CLLD I and CLRD I in MSA are fragments in the sense of Merchant (2004a). Section 5.3 is concerned with examining the merits as well as the consequences of analyzing CLLD I and CLRD I in MSA as biclausal configurations. I turn in section 5.4 to three lines of reasoning, which are typically employed under monoclausal approaches to account for CLLD I and CLRD I: agreement, clitic doubling and resumption. The original observation is that these approaches to CLLD I and CLRD I are misguided at best and cannot be extended to CLLD I and CLRD I in MSA.

## 5.2 Dislocation as clausal ellipsis

The proposed analysis in this thesis rests on three tenets: first, CLLD I and CLRD I are biclausal; the dXP appears in a separate root clause from the one hosting the clitic. Second, the clause containing the dXP is reduced by deletion at PF, which targets the whole clause modulo the dXP. Third, the relation between the dXP and the clitic is mediated by either a cross-cataphoric relation as in CLRD I or a cross-anaphoric relation as in CLLD I: no derivational link is posited between them under this analysis; but see section 5.2.3 for a qualification. Crucially, the reference of the dXP and the clitic is regulated by endophoric linking: they derive their reference from the surrounding clause (Ott 2015).

Under this analysis, the dXPs are fragments in the sense of Merchant (2004a) or remnants (i.e. those elements which survive deletion). Elements of this kind are typically subsumed in the literature under the term ‘clausal ellipsis’, which can be defined as:

a subspecies of ellipsis whereby an entire clause is missing, including the canonical subject position and the agreement domain, but often to the exclusion of one or more clause-internal constituents.

Van Craenenbroeck and Merchant (2013: 718)

Variants of clausal ellipsis include sluicing (1) (Ross 1967; Merchant 2001); gapping (2) (Johnson 2019); fragment answers (3) (Hall 2019) and split questions (4) (Arregi 2010).

- (1) Khalid liked someone but I don't know who ~~Khalid liked~~.
- (2) Khalid-un yuhibu ʔ-tufha wa nasii-run yuhibu ʔ-tufha  
 Khalid-NOM loves.3SG the-apple and Nassir-Nom loves-3SG the-apple  
 kaḍalika  
 too  
 'Khalid likes apple and Nasser ~~likes apple~~ too'
- (3) a. maḍa iʃtraa khalid-un?  
 What bought.3SG Khalidun-NOM  
 'What did Khalid buy?'  
 b. ~~Khalidun~~-ishtraa syarattan  
~~Khalid Nom~~ buy.3SG car-ACC.
- (4) Which car did Khalid buy, ~~did Khalid buy~~ a Mercedes?

Interestingly, these elliptical constructions behave in a similar fashion. Let us take for example the 'split questions' depicted in (4). As argued by Arregi (2010) in great detail, this configuration involves a *wh*-question part and a tag, these two parts of a typical 'split question' being generated in independent root clauses. While the first, and indeed antecedent, clause (i.e. CP1) contains a *wh*-question, or a correlate, the second part of split questions contains a clause which undergoes ellipsis modulo the remnant (i.e. the tag). The representation of split questions depicted in (4) is illustrated in (5).

- (5) [CP1 correlate ... ] [CP2 ... remnant]

Against this background, this thesis defends the idea that the dXPs in CLLD I and CLRD I in MSA pattern with split questions and fragments in a variety of ways. As an illustration, consider the examples in (6a) and (7a) featuring CLLD I and CLRD I in MSA respectively, with the elliptical representation for

(6a) and (7a) being depicted in (6b) and (7b) respectively. <sup>1</sup>

- (6) a. zayd-an, h?yat-u-hu  
Zayd-ACC, greeted-1SG-him.ACC  
'Zayid, I greeted him'  
b. [CP1 ~~h?yat-u~~ zaydan<sub>1</sub>] [CP2 h?yatu-hu<sub>1</sub>]
- (7) a. zurt-u-hu, zayd-an  
visited-1SG-him.ACC Zayd-ACC  
'I visited him, Zayid'  
b. [CP1 zurtu-hu<sub>1</sub>] [CP2 ~~zurtu~~ zaydan<sub>1</sub>]

By the same token, this analysis can extend to CLLD I (Ott 2015) and CLRD I (Ott and De Vries 2016) occurring in embedded contexts. Similar to the root sentences as in (6-7), the embedded dXPs as in (8-9) are syntactically connected to the host clause as evidenced by case-matching. <sup>2</sup>

- (8) a. zaʕamtu ʔanna al-walad r-risaalat-a kataba-ha  
claimed.1S that the-boy-ACC the-letter-ACC wrote.3MS-it.ACC  
'I claimed that the boy wrote the letter'  
b. [CP1 ~~kataba~~ r-risaalat-a ] [CP2 kataba-ha ]
- (9) a. zaʕamtu ʔanna al-walad kataba-ha, r-risaalat-a  
claimed.1S that the-boy-ACC wrote.3MS-it.ACC the-letter-ACC  
'I claimed that the boy wrote the letter'  
b. [CP1 kataba-ha] [CP2 ~~kataba~~ r-risaalat-a]

<sup>1</sup>The non-trivial question which arises: why is ellipsis applied? is it obligatory? I assume in this thesis that the non-elliptical counterparts are acceptable, but heavily redundant (Ott 2015; Fernández-Sánchez 2017, 2020). Hence, (optional) ellipsis is favoured due to pragmatic reasons: by pronouncing the elliptical counterparts, the sentence turns out to be pragmatically odd. This is not, however, a blanket statement that ellipsis is an optional operation *in toto*. For example, ellipsis involving comparative deletion is argued to be obligatory as the example in (a) shows, taken from Lechner (2004: 24).

a. Mary knows younger authors than Peter knows [\*younger authors]

More recently, drawing on Kennedy and Merchant (2000), among others, Abels (2019: 1247f) entertains the possibility that the morphology of a language can sometimes force ellipsis. At any rate, I remain agnostic about the obligatory cases of ellipsis, and assume instead that ellipsis in the cases of CLLD I and CLRD I in MSA is optional, which is triggered by discursive reasons (i.e. it is a way to resolve heavy redundancy).

<sup>2</sup>The question which may arise: how would this analysis account for CLLD II and CLRD II, which are known to exhibit case-mismatching? In fact, this approach to clitic-resumption constructions takes connectivity effects, like case matching, as a crucial basis to explain the observed facts. As noted by Ott (2014: p.284, ft.26), for this analysis to go through for CLLD II and CLRD II, what is at stake is "the question of whether nominative case is a true *nominativus pendens* or requires functional structure". Alas, pursuing this line of argument would take us too far afield, and I am obliged to leave it to future research.

Under the elliptical analysis of CLLD I and CLRD I in MSA, CP1 and CP2 are taken to be separate root clauses, which are parallel *modulo* the difference between the dXP and the clitic. The dXP is conceived to be a remnant of a clause which is reduced by ellipsis at PF. The difference between CLLD I and CLRD I w.r.t ellipsis concerns directionality of ellipsis: while ellipsis is backward in CLLD I, it is forward in CLRD I, thus rendering the clitic in CLLD I anaphoric, but cataphoric in CLRD I. Given the fact that ellipsis is a lively area of debate in the generative literature, I will not discuss all of the types of ellipsis listed earlier in detail. Instead, my focus will be entirely on fragments, which prove to pattern with the dXPs in CLLD I and CLRD I in MSA. For a recent and extensive discussion of the phenomenology of ellipsis, the reader is referred to the volume edited by [Van Craenenbroeck and Temmerman \(2019\)](#).

### 5.2.1 Fragments: a type of clausal ellipsis

According to [Hall \(2019: 605\)](#), "(f)ragments are utterances that appear to be smaller than a sentence ... occurring without an overt antecedent", as exemplified in (10b). These utterances typically convey the same propositional force as their fully sentential counterparts.

- (10) a. maðat ʃarib          ali-un  
           what drank-3SG Ali-NOM  
           What did Ali drink?
- b. ʃayaan  
           tea-ACC

The question which has spawned a lot of proposals in the literature concerns how fragments of the type in (10b) can be analyzed in the grammar. One view advanced by [Ginzburg and Sag \(2000\)](#), [Stainton \(1998, 2005\)](#) and [Progovac \(2006\)](#) a.o., is that they are non-sentential constituents, which lack any accompanying clausal syntax. Another competing proposal, the most detailed work of which is [Merchant \(2004a\)](#)'s seminal paper '*Fragments and Ellipsis*', argues that these fragments contain an invisible syntactic structure, which undergoes TP ellipsis. Specifically, "at the LF interface nothing much changes compared to non-ellipsis, but the phonology leaves part of the structure unpronounced" ([Aelbrecht 2010: 7](#)). The main area of divergence between the two schools of thought can be ascribed to how *connected* the remnant is w.r.t the elided site. In [Merchant \(2019\)](#)'s words:

Structural approaches are based on what I call connectivity effects;

nonstructural approaches take their lead from nonconnectivity effects. Connectivity effects occur when some part of the clause that contains the ellipsis shows ‘connectivity’ to some other, supposed, unpronounced part; nonconnectivity is when this does not occur, despite a prior expectation that it would.

In this thesis, I defend the second view, arguing that it fares well with MSA; this is not unprecedented though, see e.g., [Algryani \(2017\)](#) for a view along this line. Before going into the syntax of fragments in MSA, let us pause a moment and see what are the arguments proposed in favor of the (non)-sentential approaches to fragment answers.

One of the proponents of non-sentential accounts to fragment answers is [Progovac \(2006\)](#), who provides a couple of arguments to countenance this position. First comes anti-connectivity effects. According to [Progovac](#), the pronoun as in (11a) is case-assigned accusative, while what is expected is that the pronouns should appear in nominative case as in (11b), if the elided site is a full sentence.

- (11) Who wants the apple?  
a. Me/him/ them  
b. \*I, he, they

[Progovac](#) interprets the absence of nominative case in (11a) as an argument for the assumption that fragments are not part of elided TPs, but syntactic NPs which are base-generated where they appear (i.e. they are generated on their own, not as part of a larger (sentential) structure). To account for why accusative case surfaces instead of nominative in (11a), [Progovac](#) resorts to the idea of default case, that is, the pronouns *me/him/them* are complete syntactic objects, with no features left to be checked, eschewing the need to project a (T)ense projection, which is typically taken to be responsible for nominative case-assignment.

Another argument against a silent structure in the elided site comes from the behavior of answers containing a verbal utterance. For example, the verb in (12b) typically appears in a nonfinite form, which does not project a TP. According to [Progovac](#), this is not as predicted under the structural approach to fragments, which would predict that the verb should be specified for a relevant tense as in (12c).

- (12) a. What did Mary do?

- b. steal the car.
- c. ??stole the car

As such, the appearance of the verb *steal* uninflected in (12b) can be attributed to the absence of a tense slot in the skeleton of the clause, strongly suggesting that we are dealing with a bare verbal utterance (i.e. VP), which is base-generated where it appears; i.e., what we see is what we get (Culicover and Jackendoff 2005) and hence there is no silent/hidden syntax which can be taken as the source of the utterance *steal the car*.

As alluded to earlier, the structural approach to fragments typically departs from connectivity effects: if there is an indication that the remnant bears a relation to the elided clause, then it is appealing to suppose that this remnant is not born out of the air, but it is associated with a hidden clausal syntax, which is suppressed at PF. As noted by Merchant (2019), among others, looking for this invisible syntax looks like a search for a “black hole”: you can tell that it does exist by appealing only to its effects. In what follows, I zoom in on this approach in some detail.

One of the strongest pieces of evidence in favor of invisible syntax in the elided site comes from case connectivity. That is, if a remnant exhibits the same morphological case it should have were it in its canonical position in a full sentence, this strongly suggests that this remnant is indeed a part of clausal syntax. Crucially, this can be verified only in languages where case is morphologically marked such as Greek. As far as fragments are concerned, the logic goes as follows; if the remnant starts its derivational history as e.g. a nominative-assigned element, as is expected under this approach, the short answer must bear the same morphological case as in nonelliptical contexts (i.e. nominative case in this case). This prediction is borne out indeed as the behavior of fragments in Greek shows. By way of illustration, consider the example in (13), adapted from Merchant (2006: 75).

- (13)    pjos            idhe tin Maria?  
          Who-NOM saw the Maria?  
          ‘who.NOM saw the Maria?’
- a.    O Gianni  
          The Gianni.NOM
  - b.    \*Ton Gianni  
          The Giannis.ACC

Another connectivity effect used to support the presence of clausal syntax



in fragment answers is binding connectivity ([Merchant 2004a, 2006](#)) and ([Hall 2019: 620](#)). The following examples illustrate the point.

- (14) a. Who did John<sub>i</sub> try to shave?  
           - [<sup>\*</sup>Him<sub>i</sub>] John<sub>i</sub> ~~tried to shave~~ t<sub>i</sub>  
       b. Where is he staying?  
           - [<sup>\*</sup>In John<sub>i</sub>'s flat] he<sub>i</sub> ~~is staying in~~ t<sub>i</sub>  
       c. Who does John love?  
           - [Himself] John<sub>i</sub> loves t<sub>i</sub>

The fragments in (14a,b) are ungrammatical in contrast to (14c), which does not induce a grammaticality violation. A straightforward answer to this is rooted in Binding Theory ([Chomsky 1981](#)). Specifically, the fragments in (14a,b) are out because they give rise to Condition B and C violations respectively: they are not subject to a standard disjoint reference effect, which is typically applied to pronominals and proper names. The question which arises: what does this have to do with the structural approach to fragments? In fact, the grammaticality of (14c) shows that there is a clausal syntax which still affects the interpretation of the sentence: given the essential premise of Principle A of Binding Theory requiring an anaphor to be c-commanded by an antecedent, the grammatical presence of the anaphor as a fragment strongly suggests that this anaphor is indeed related to an invisible antecedent. This conclusion is further enhanced by the ungrammaticality of (14a,b). Under the assumptions of the non-structural approach to fragments, however, the ungrammaticality of (14a,b) cannot be accounted for since there is no binder for the pronoun or name, so Principle B or Principle C should not be violated. Therefore, the optimal analysis for the well-formedness of (14c) as well as the deviance of (14a,b) is that these fragments are indeed still related to a clausal syntax, giving rise to their (un)grammaticality.

Another argument in favor of silent syntax in the context of fragments comes from (P)reposition stranding (P-stranding). This argument typically rests on an influential generalization made by [Merchant \(2001: 92\)](#), according to which:

A language L will allow preposition stranding under sluicing [and fragments; see [Merchant \(2004a: 685\)](#)] if and only if L allows preposition stranding under regular *wh*-movement.

This argument goes that only constituents that move can be fragment answers in that language. For example, in a non P-stranding language such as Greek,

P-stranding is blocked and hence the preposition has to be pied-piped. This is exemplified in (15). By contrast, in a P-stranding language such as English, bare DP fragment answers are allowed as illustrated in (16).

- (15) a. Me pjon milise i Anna?  
With whom spoke the Anna?  
b. \*(Me) ton Kostas  
with the Kostas
- (16) a. Who was Peter talking with?  
b. Mary

What these data suggest is that the fragment is actually the mirror image of clausal syntax. In other words, contrary to the non-structural approach to ellipsis, connectivity effects, and hence the presence of silent syntax, go in parallel with movement structures. I will return to this issue in section 6.4.3.1.

Having discussed the (non)-structural approaches to ellipsis, I move on now to fragments in MSA, which prove to provide a strong argument in favor of clausal syntax in the derivation of fragments.

## 5.2.2 Fragments in MSA

Interestingly, fragments in MSA present a strong case in point in favor of silent syntax. First comes case connectivity, where the fragment answer must bear the same morphological case were it in its canonical position in a full sentence. By way of illustration, consider the following example:

- (17) mađa kataba ali-un?  
What wrote.3SG Ali-NOM  
'what did Ali write'  
a. rawaytt-an / \*rawaytt-un  
novel-ACC / novel-NOM
- (18) kataba ali-un rawaytt-an  
wrote.3SG Ali-NOM novel-ACC  
'Ali wrote a novel'

The fragment in (17a) bears the accusative case, which means that this fragment answer starts its derivational history as an object of the verb *katab* 'wrote' as in (18), where it is originally case-marked accusative. This fact further militates against *Progovac*'s nonstructural approach to ellipsis alluded to earlier. Recall that *Progovac* claims that the pronouns in English bear accusative case

when they appear as fragments due to the default case; a special operation of case-assignment which is applied to DPs when there is no structural case assigner in the sentence. A straightforward objection to this claim is that the default case in MSA is nominative (Fassi Fehri 1993; Ouhalla 1994a), and hence on the nonstructural approach to ellipsis as in Progovac (2006), fragments in MSA should be assigned nominative case, contrary to fact.<sup>3</sup> What this suggests, hence, is that the fragments in MSA must have the case that it would have if they were part of a full clause. Recall that Progovac (2006) claims that anti-connectivity effects arise in English VP short answers: they appear uninflected as in (12b); see also Casielles (2006) for a position along these lines. This is taken as an argument for the absence of clausal syntax in fragments; that is, the overt display of infinitive VPs as fragments in English entails the absence of T-node, thereby suggesting that we are dealing with a base-generated VP. This position, however, cannot be extended to MSA, where the verb in fragment answers is inflected for the same tense were it in its canonical position in a full sentence (20), i.e., past tense.

- (19) a. maḏa faʿal                      Ali-un?  
           What did.3SG.PAST Ali-NOM  
           ‘what did Ali do’  
       b. saraga                      al-syarat-a  
           stole.3SG.PAST the-car-ACC  
       c. \*sarigata al-syarat-a  
           steal.INF the-car-ACC
- (20) Ali-un    saraga                      al-syarat-a  
       Ali-NOM stole.3SG.PAST the-car-ACC  
       ‘Ali stole the car’

As such, the appearance of the verb *steal* inflected in (19b) can be attributed to the presence of a tense slot in the skeleton of the clause, strongly suggesting that we are dealing with a TP not a base-generated VP, contrary to the proponents of the nonstructural approach to ellipsis.<sup>4</sup>

<sup>3</sup>As noted by Hall (2019: 612), the ontology of the default case is still an area of heated controversy: while Schütze (2001) argues for it, Merchant (2004a) rejects it, and hence the success of the nonstructural approach to ellipsis as argued by Progovac (2006) mainly depends on what this discussion would eventually give rise to.

<sup>4</sup>One may wonder that given that Arabic is a pro drop language, how can we be sure that the example in (19b) actually involves ellipsis, rather than being a full sentence with a pro subject? In fact, the usage of a pro subject in (19b) is a highly marked choice in this context, and hence the answer should not involve a pro subject, but an overt one as the example depicted in (20) shows.

Another argument for the assumption that fragments in MSA contain silent syntax comes from P-stranding and island sensitivity. As noted by [Algryani \(2017\)](#), MSA is a non-P-stranding language and hence P-stranding is neither allowed in fragments as in (21a) nor in full sentences (22).

- (21)    *maʕa man tahadaθat Hind-un?*  
          With who talked-3SG Hind-NOM  
          ‘with whom did Hind talk’  
       a.    \**Zayid-en*  
               *Zayid-GEN*  
       b.    *Maʕa Zayid-en*  
               With *Zayid-GEN*
- (22)    \**Zayd-en*        *tahadaθat Hind-un*    *maʕa*  
               *Zayiden-GEN* talked-3SG Hind-NOM with  
               ‘Hind talked with Zayid’

The typical explanation is rooted in a movement-plus-deletion analysis according to which the fragment *Maʕa Zayd-en* ‘with Zayid’ starts its derivational history as a complement of the verb *tahadaθat* ‘talked’, and then undergoes movement to the left periphery before the whole TP gets deleted. More on this in section 6.4.3.1.

By the same token, the fact that remnants in MSA are sensitive to islands is further argument for clausal syntax. The argument goes that the remnant is closely related to a sentential answer: if the fragment answer occurs within an island, only a fully sentential answer is possible as in (23c), to the exclusion of a bare fragment as in (23b). The plausible explanation for the ungrammaticality of the remnant in the context of islands is to assume that the remnant undergoes movement crossing an island node before the entire TP gets deleted, thereby inducing a grammaticality violation. More on this in section 6.4.3.2.

- (23)    Adjunct island ([Algryani 2017](#): 322)
- a.    *Hal ʔatat        liʔanka        lam tadʕu        Hindan?*  
               Q    came.3FS because-you NEG invited-2MS Hind-ACC  
               ‘Did she come because you didn’t invite Hind?’
- b.    \**la, Omr-an*  
               no, Omr-an.ACC
- c.    *la, ʔatat        liʔana-ka        lam tadʕu        Omr-an*  
               no came.3SG because-you NEG invited-2SG Omr-.ACC

‘No, she came because you didn’t invite Omar.’

### 5.2.3 Specifying Coordination

So far, the proposed analysis has claimed that CLLD I and CLRD I are biclausal: they are complex phenomena involving two clauses. The question which arises at this point: is there any (structural) relation between CP1 and CP2 under the biclausal analysis proposed in this thesis? A possible relation is one of parenthesis: the dXP is parenthetical to the host clause. Parentheticals are typically identified as those expressions which are assumed to be:

linearly represented in a given string of utterance (a host sentence), but seem structurally independent at the same time. They have been argued to interrupt the prosodic flow of an utterance, introducing intonational breaks and featuring prosodic properties different from those of their host. They are outside the focus-background structure of their host utterance and are usually associated with non-truth conditional meaning. Parentheticals typically function as modifiers, additions to or comments on the current talk. They often convey the attitude of the speaker towards the content of the utterance, and/ or the degree of speaker endorsement.

[Dehé and Kavalova \(2007: 1\)](#)

A hotly debated issue in generative grammar is how best to account for parentheticals relative to the host clause. Under one view, parentheticals are not syntactically integrated into the host clause. This position is typically referred to as an ‘orphan approach to parenthesis’ ([Haegeman 1991](#); [Burton-Roberts 1999](#)). Another view argues that parentheticals are syntactically connected to the host but with a caveat: “a parenthetical cannot affect the syntax of the host clause, but grammatical requirements imposed by material in the parenthetical can be satisfied by elements in the host clause” ([Ackema and Neeleman 2004: 96f](#)); see also [De Vries \(2007b, 2012a,b\)](#). A third view, however, strikes a balance between orphan and integration approaches to parenthesis (i.e. parenthesis shows the properties of (in-)dependence) ([Espinal 1991](#)). For extensive discussion of the state of the art on the syntax of parentheticals, the reader is referred to the volumes edited by [Dehé and Kavalova \(2007\)](#) and [Kluck et al. \(2015\)](#). Even though I refrain from entering this debate, I hasten to add that the last two views are in line with the Janus-faced behavior of the dXPs in MSA

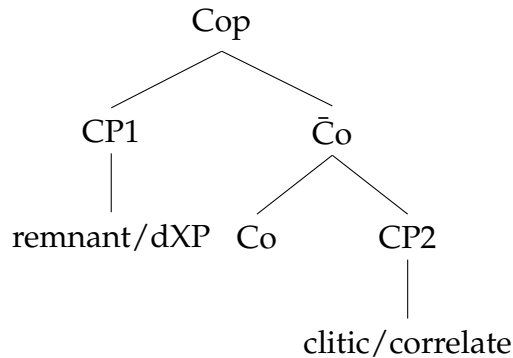
Coordination is a syntactic configuration consisting of two or more units, which must be typically linked by a particle of particular semantics. Different kinds of coordination have been identified in the literature according to the linking particle: additive coordination (*and*), disjunctive coordination (*or*), adversative coordination (*but*). These different kinds of coordination are exemplified in (24).

- The departure point of [De Vries \(2007b, 2009b\)](#) is that there are some configurations which cannot be semantically fit into this classification. An appositional construction is a prime example. By way of illustration, consider the example in (25).

- According to De Vries, the example in (25) involves a different coordination configuration dubbed ‘specifying coordination’. In particular, a typical appositional construction consists of an anchor and an apposition. Semantically speaking, the main role of the apposition *my roommate* in (25), which is a non-restrictive modifier, is to specify or explicate the anchor *Joop*. Building on earlier work by Koster (2000) among others, De Vries argues in great detail that an appositional construction of the sort depicted in (25) is a type of specifying coordination: it is a type of asymmetric coordination where the second conjunct specifies or explains the first conjunct. I assume in this thesis, following De Vries, that specifying coordination is a mechanism mediating between CP1 and CP2 in CLLD I and CLRD I. Crucially, I diverge from De Vries’s characterization of specifying coordination by assuming that the elided clause, typically containing the dXP, specifies the nonelliptical clause, which typically contains

the clitic . The technical implementation of this type of coordination is rooted in X-bar theory: the coordinator is a functional head projecting a Coordination Phrase (CoP), and CP1 and CP2 are in a specifier-complement configuration. This is represented in (26) for a CLLD I articulation.

(26)



It is crucial at this point to stress that positing a specifying coordination has non-trivial merits. First, it neatly captures the apparent information-structural paradox attested for the dXPs in CLLD I and CLRD I. In particular, given the fact that the remnants are typically interpreted as focal, this state of affairs seems to be at odds with the discursive import of the dXPs partaking in the phenomenology of Arabic dislocation, which is rooted in contrastiveness (i.e. while CLLD I is a contrastive topic, CLRD I is a contrastive focus). As I will show in section 6.2, this tension is apparent actually, since the dXP typically provides specifying/new information relative to the internal-clause clitic, giving rise to the semantic asymmetry required for the specifying coordination. In a sense, *locally focused constituents* such as the dXPs can be backgrounded in the discourse (Ott and De Vries 2016). Second, assuming a specifying coordination to mediate between CP1 and CP1 makes it possible to tie CLLD I and CLRD I with other phenomena, which employ non-restrictive modifiers in their derivations, such as appositives, split questions, afterthoughts and the like; a welcome result. Finally, as argued by De Vries (2007a: 242), specifying coordination can provide a phonological explanation for the assumption that the dXPs form an intonational phrase. I defer discussion of the prosody of CLLD I and CLRD I under the biclausal analysis till section 6.3.

### 5.3 CLLD I and CLRD I in MSA: a biclausal analysis

In this section I argue that the properties of CLLD I and CLRD I follow from a purely biclausal approach. As pointed out in the previous chapter, CLLD I and CLRD I in MSA show the properties of movement and base-generation at the same time. The conundrum is that the monoclausal approaches to CLLD I and CLRD I fall short of accounting for the (in-)dependence effects exhibited by CLLD I and CLRD I. In particular, the absence of WCO effects for example would favor a base-generation account, but connectivity effects, such as case matching, will require *ad hoc* auxiliaries assumptions under a purely base-generation account. By contrast, a movement-based analysis can nicely account for connectivity effects, but will require unmotivated stipulations to derive the independence (i.e. base-generation) effects. Importantly, this bizarre status is highly predictable under the biclausal approach: clause-external properties are accounted for by assuming that the dXP is independently generated in a separate clause from the clitic, while clause-internal properties are a consequence of the assumption that the dXP is related to an elided clause, which superficially appears to be related to a host-internal clitic due to parallelism. As such, the proposed analysis eschews the need to employ superfluous mechanisms to derive Cinque's paradox. In what follows, I discuss these properties in MSA, and show how they mesh well with the proposed analysis.

#### 5.3.1 Deriving movement properties

##### 5.3.1.1 $\theta$ and case properties

As pointed out in the previous chapter, there are cogent reasons pointing to the conclusion that the dXP in CLLD I and CLRD I in MSA has been within the host clause at some point of the derivation. For example, the following examples in (27) and (28), featuring CLLD I and CLRD I in MSA, show that the dXP is interpreted as the theme of the predicate 'read'; unexpectedly, though, the same  $\theta$ -role is assigned to the clitic as well. Under the monoclausal approaches to dislocation, a  $\theta$ -theoretic violation is expected, unless an exceptional, and indeed unmotivated, chain formation (cf. Cinque's (1990) Binding Chain) is enforced. Under the current approach, however, no such problem arises: identical  $\theta$ -assignment is expected: the two clauses must be semantically parallel as a precondition for ellipsis; otherwise, ellipsis cannot be licensed. Therefore,



the dXP and the clitic receive their  $\theta$ -roles in their respective clauses: they are assigned the same kind of  $\theta$ -role by the same kind of predicate, each in their own clause in CLLD I (27) and CLRD I (28) in MSA.

- (27) a. alkitab-a      qarat-u-hu  
          the book-ACC read-1SG-it.ACC  
          'I read the book'
- b. [THEME/ACC alkitab-a ] ... [THEME/ACC hu]
- (28) a. qarat-u-hu,      alkitab-a  
          read-1SG-it.ACC the book-ACC  
          'I read the book'
- b. [THEME/ACC hu] ... [THEME/ACC alkitab-a]

The same logic carries over to case matching attested for CLLD I and CLRD I as illustrated in (27, 28), where the dXP must match the case-marking of the clitic. Under the current proposal, case connectivity is readily accounted for in a principled fashion: the dXP and the clitic are case-assigned by the same predicate in their respective clauses. This is again ascribed to the parallelism condition on ellipsis, where the predicates in relevant clauses must be identical; otherwise the ellipsis operation would not be felicitous. This state of affairs (i.e. parallel case/ $\theta$ -assignment) is not a quirk of a construction-specific operation, but is highly reminiscent of the behavior of fragments answers and sluicing which typically exhibit the same effects. All in all, case/ $\theta$  connectivity is boiled down to obligatory parallelism between CP1 and CP2 in cases of clausal ellipsis (Merchant 2004a; Brunetti 2003).

### 5.3.1.2 Reconstruction data

CLLD I and CLRD I in MSA exhibit reconstruction effects for the computation of Condition C (i.e. the dXP is interpreted where it is originally base-generated). For example, when the dXP contains an R-expression as in (29, 30), this R-expression cannot be coreferential with the pro in the host clause, giving rise to ungrammaticality as per Condition C.

- (29) a. ??kitab-a    ali-en<sub>i</sub>,    pro<sub>i</sub> qarau-hu      albariha  
          book-ACC Ali-GEN pro    read.3SG-it.ACC last night  
          '\*He<sub>i</sub> read Ali<sub>i</sub>'s book.
- b. [CP1 kitab-a ali-en<sub>i</sub> pro<sub>i</sub> qarautu t<sub>i</sub> albariha]
- (30) a. ??pro<sub>i</sub> qarau-hu      albariha, ?kitab-a    alyian<sub>i</sub>  
          pro    read.3SG-it.ACC last night book-ACC Ali-Gen

'\*He<sub>i</sub> read Ali<sub>i</sub>'s book.'

b. [CP<sub>2</sub> kitaba alyian<sub>i</sub> pro<sub>i</sub> qarautu t<sub>i</sub> albariha]

Under the biclausal approach to CLLD I and CLRD I, reconstruction effects arise in the elided clause hosting the dXP; accordingly, this means that the dXP is interpreted within the elliptical CP<sub>1</sub> in CLLD I (29b) and CP<sub>2</sub> in CLRD I (30b). As it stands, the relevant Condition C violation obtains in the elided clause giving rise to the apparent impression that there is reconstruction into the host clause, contrary to fact, i.e. there is reconstruction in (29) and (30) but within the elided clause.

### 5.3.1.3 Island sensitivity: loose ends

The sensitivity of CLLD I and CLRD I to islands is another classical argument for a movement analysis. As the examples in (29) show, the dXP is separated from the host clause containing the clitic by an island. Under a monoclausal approach to CLLD I and CLRD I, these locality effects are typically accounted for by assuming that the dXP is base-generated within the host clause at some point of the derivation, and then undergoes movement to a dedicated position in the sentential periphery. Given that this operation crosses an island in (31), a grammaticality violation would ensue.

- (31) a. \*Ric, aniré al dentista [quan ho sigui]  
           rich I.will.go to.the dentist when it I.am  
           'I'll go to the dentist when I'm rich' Catalan (Villalba 2000)
- b. \*Che glie la presti mi sembra strano, la macchina  
           that to her it lends to me seems weird the car  
           'It seems weird to me that he lends her the car'

Italian (Cecchetto 1999)

To derive locality effects under the biclausal analysis it is assumed that the dXP undergoes movement to the left edge of the elided clause before the entire TP gets deleted (De Vries 2013). On this analysis, locality effects arise in the elided clause because it is where the dXP undergoes movement from within. Admittedly, although this analysis can account for the islands sensitivity exhibited by CLLD I and CLRD I, they still fall short of achieving *a real theoretical gain*. In particular, the biclausal analysis is originally advanced to account for the fact that the dXP simultaneously displays the properties of movement and base-generation. This biclausal approach to islands sensitivity, however, does involve an *unmotivated* movement operation as I will show in section 6.4, and

hence I do not think this move makes us closer towards resolving this paradox. Evidently, that the dXP moves is the dominant thread running through the literature on the biclausal analysis of CLLD I and CLRD I (Park and Kim 2009; Ott 2015; Ott and De Vries 2016), but see Fernández-Sánchez (2017, 2020)<sup>5</sup>.

Complicating the picture somehow, locality effects in MSA are not uniform as shown in chapter 2: while CLLD I is transparent for islands, CLRD I is selectively opaque for islands. Given the fact that this issue merits a special treatment, I will postpone it till section 6.4.4.2, where I deviate from the mainstream biclausal analysis and argue that the dXP does not undergo movement within the elided clause, but it stays in-situ.

## 5.3.2 Deriving base-generation properties

### 5.3.2.1 A c-command glitch

A highly problematic aspect of the monoclausal treatments is how best to derive the sentence in (32).

- (32) ??*pro*<sub>i</sub> *qarau-hu*      *albariha* *kitabā*      *alyian*<sub>i</sub>  
       *pro* read.3SG-it.ACC last night book-ACC Ali-GEN  
       ‘\*He<sub>i</sub> read Ali<sub>i</sub>’s book.’

In particular, assuming that CLRD I is monoclausal leads to a serious paradox. To explain why, consider the example in (32), where the Condition C violation is easily attributed to the fact that the dXP occurs within the c-command domain of the preverbal subject *pro*. Interestingly though, note that the dXP in (33) is still in the c-command domain of the clitic, suggesting that a Condition C would incur in all cases of right dislocation, contrary to fact.

- (33) *pro* \*<sub>i-k</sub> *qarau-hu*<sub>i</sub>      *albariha* *kitabā*      *alyian*<sub>i</sub>  
       *pro* read.3SG-it.ACC last night book-ACC Ali-GEN  
       ‘He<sub>i</sub> read Ali<sub>k</sub>’s book.’

In short, we are faced with a paradox: the behavior of the dXP in (32) displays a schizophrenic behavior. On the one hand, there seems to be evidence that the dXP is related to a clause-internal position (i.e. Condition C effects)

<sup>5</sup>Fernández-Sánchez argues that the dXP in CLRD I in Romance languages does not move. To account for the locality conditions, he proposes a linear condition dubbed the Minimal Coordination Hypothesis (MCH) according to which locality effects can be avoided if there is an adjacency between the dXP and the lowest finite CP that contains the clitic: the dXP must be adjacent to the island that contains the clitic in the antecedent clause. Crucially, if this condition is not met, locality effects would ensue. Unfortunately, though, this treatment is not satisfactory either for the reason that it is a mere stipulation as he himself acknowledges.

which would not mesh well with base-generation approaches to CLRD I. On the other hand, the dXP simultaneously behaves as base-generated element in the right periphery, precluding a c-command relation with the clitic. In [Fernández-Sánchez \(2020: p.31\)](#)'s words, "the dXP must be in its thematic position for interpretation purposes, but it cannot be there because otherwise it is in the c-command domain [of] the clitic". Put informally, the dXP can be "seen" by the preverbal subject *pro* in (32), but not by the clitic in (33). See also [Fernández-Sánchez \(2017: 85\)](#) and [Fernández-Sánchez \(2020: 31\)](#) for a similar observation in Spanish.

Interestingly, this issue has gone unnoticed in the literature. A prominent exception to my knowledge, however, is [Cecchetto \(2000: p.42, fn.4\)](#), who addresses this paradox, albeit in a footnote as a response to a reviewer. The original observation is that a right-dislocated subject in French, which is coindexed with a subject clitic, does not typically induce a Principle C violation.

- (34) Il est gentil, Jean  
He is nice, Jean.

According to [Cecchetto](#), this problem is rarely raised in the literature on doubling constructions in general, but he entertains a solution, "with no real explanatory power" as he himself acknowledges. His explanation for this is rooted in [Chomsky \(1981\)](#) in that "the type of coindexing which links the clitic (or null) pronoun and the R-expression in [(34)] is distinct from the coindexing that is relevant for the Binding Theory (co-superscripting as opposed to subscripting, in Chomsky's terms". Admittedly, this explanation is insufficient since it merely restates the observed asymmetry in technical terms, but without accounting for why a Condition C violation is attested in one instance, but not in the other. Importantly, the biclausal analysis of CLRD I explains in a principled manner the exact determination of the mechanism which either gives rise to a Condition C violation or the absence thereof. Under the claim that the dXP and its associated clitics are generated in separate clauses, this problem fades away: the absence of a Condition C violation arises for the simple reason that the clitic does not c-command the dXP since the two elements are base-generated in two different (root) clauses. On the other hand, the apparent reconstruction effects ( and hence a Principle C violation ) arise in the elided clause containing the dXP, which must be semantically identical to the antecedent clause as shown earlier. Hence, no further *ad hoc* mechanisms are needed to account for the paradoxical behavior of Condition C under dislocation.

### 5.3.2.2 Weak Crossover (WCO) & Parasitic Gaps (PGs)

One of the main features of CLLD I and CLRD I in MSA is the absence of WCO effects as well as the failure of parasitic gaps (PGs) licensing. At first sight, these configurations are taken as an argument for a non-movement analysis. These non-movement properties, however, are expected under the current approach: the dXP is generated at the exterior of the host clause, specifically in a different clause.

Turning first to WCO effects, it has been noted in the literature that topics in left dislocation fail to give rise to WCO effects as opposed to focus fronting (Rizzi 1997; Zeller 2004, 2005). For cartographic analyses, which takes movement as an indispensable condition for the derivation of information-structural categories, the lack of WCO effects are accounted for by stipulation. For example, Rizzi (1997: 291f) resorts to a construction-specific analysis in that focus involves quantificational A'-binding, which typically binds a syntactic variable in an A-position, while topics does not display these properties. In fact, this position is reminiscent of Lasnik and Stowell (1991)'s observation that WCO effects are suppressed in configurations which are argued to exhibit what they dub 'weakest crossover': a term which refers to those elements which are not qualified to behave as "true quantifier phrases". The logic is that topicalized elements are not true quantifiers, thereby they are not related to a copy which can be counted as a genuine variable. Under the biclausal analysis of CLLD I and CLRD I, the absence of WCO effects is accounted for by truly simple and parsimonious terms: since the dXP is structurally separated from the host clause containing the clitic, it is not expected that the dXP is moved across the clitic, since the clitic originates in a different clause, and hence WCO effects are not expected to ensue to begin with.<sup>6</sup>

- (35) a. khalid-an<sub>i</sub> ?oumo-hu<sub>i</sub> tuhybu-hu<sub>i</sub>  
 Khalid-ACC mother-his loves.3SG-him  
 'Khalid, his mother loves him

<sup>6</sup>A slight wrinkle here: if one follows Merchant (2004a) that the fragment must undergo movement, we would predict that WCO effects would ensue in Arabic CLLD I and CLRD I (a), contrary to fact.

- a. \*[khalid-an<sub>i</sub> ?oumo-hu<sub>i</sub> tuhybu t<sub>i</sub> ]

To account for this, Ott (2015: 252) argues that this is only apparent. To show that this is the case, this author maintains that this problem can be overcome if one assumes that "the R-expression in CP2 licenses a coreferent pronoun in the deleted portion of CP1" as shown in (a) below.

- a. [CP1 khalid-an<sub>i</sub> [~~pro<sub>k</sub>/she<sub>k</sub>~~ tuhybu t<sub>i</sub> ] [CP2 ?oumo<sub>k</sub>-hu<sub>i</sub> tuhybu-hu<sub>i</sub>]

- b. [<sub>CP1</sub> ?oumo-hu tuhybu khalid-an ] [<sub>CP2</sub> ?oumo-hu tuhybu-hu]

By the same token, parasitic gaps (PGs) licensing is a feature typical of constructions derived by A'-movement (Richards 2014). The failure of PGs licensing in the context of CLLD I for instance is truly a pebble in the shoe for movement-based analyses of clitic-resumed configurations, since they are typically accounted for by unmotivated mechanisms. For instance, to account for the unavailability of PGs as depicted in (36b), Demirdache (1991: 184f) argues for a linear account where for the PG to be licensed, the pronoun has to occur to the right of the PG (36a). This is illustrated below by data from Greek.

- (36) a. (?)ton Yanis<sub>i</sub> i-Maria ipe xoris na agapa e<sub>i</sub> oti pro tha  
the John the-Mary said without SUB loves that she FUT  
ton<sub>i</sub> pandrefti  
him marry  
'John, Mary said that she will marry him without love.'  
b. \*ton Yanis<sub>i</sub> i-Maria ipe oti pro tha ton<sub>i</sub> pandrefti xoris na  
the John the-Mary said that she FUT him marry without SUB  
agapa e<sub>i</sub>  
loves  
'John, Mary said that she will marry him without love.'

The problem with such a line of reasoning is that it does not matter for MSA whether the pronoun occurs to the right of PG : the derivation leads to an ill-formed string as in (37).

---

Under this analysis, WCO effects do not arise, the reason being that the dXP does not cross the original R-expression. The impetus for this analysis is the so-called 'Vehicle Change' (VC), due to Fiengo and May (1994: 218), according to which " nominals can be treated as non-distinct with respect to their pronominal status under ellipsis". The main objective of this mechanism is to void a possible Condition C violation. In (ab) below for example, there is no a Condition C violation, because *Alex* in (aa) is treated as a pronoun.

- a. They arrested Alex<sub>i</sub>, though he<sub>i</sub> didn't know why.  
a. \*though he<sub>i</sub> didn't know [why they arrested Alex<sub>i</sub> ]  
b. though he<sub>i</sub> didn't know [why they arrested him<sub>i</sub> ] Merchant (2001)

Two issues are worth highlighting here. First, that movement is an essential condition for deriving fragments is misguided both conceptually and empirically in a sense to be examined in section 6.4. Interestingly, this has been sketched so briefly by Ott, albeit in a footnote (Ott 2015: p.254, fn.24), that WCO obviation attested for CLLD I can be dealt with by assuming that the fragments stay in situ. Second, VC is a suspicious mechanism,, to say the least, since it is a mere stipulation, which is proposed originally to void a violation; see Safir (1999) and Lasnik (2003) for discussion. Incidentally, Ott is aware of the ill-understood nature of VC, as shown by his personal correspondence with Javier Fernández-Sánchez (Fernández-Sánchez 2017: 170, fn.24), but this problem has not received the deserved attention in his paper on CLLD I.

- (37) \*Khalid-en, abhaθ-u anu-e<sub>i</sub> li juhoor-in doun ?an  
 Khaild-GEN look for-1SG-about-him for months-GEN without to  
 ?azida hu<sub>i</sub>  
 find  
 'Khalid, I have looked for for months without finding'

Under the proposed analysis, this can be accounted for by simply assuming that the dXP—the head of the A-bar movement chain—is generated in a different clause from the one containing the clitic and the PG, and hence it is not expected for an A'-dependency typical of PG configurations to be established.

- (38) \*[<sub>CP1</sub> abhaθ-u li juhoor-in doun ?an ?azida khalid-an] [<sub>CP2</sub> abhaθ-u anu-e<sub>i</sub> li juhoor-in doun ?an ?azida hu<sub>i</sub>]

Another possible, delicate though, analysis to account for the failure of PGs is attributable to the semantic parallelism condition characteristic of elliptical configurations: since there is a gap in the host clause, the infelicity of PGs in the context of CLLD I and CLRD I is reduced to the incompleteness of the host clause.

- (39) [<sub>CP1</sub> abhaθ-u li juhoor-in doun ?an ?azida khalid-an] [<sub>CP2</sub> abhaθ-u anu-\*(hu)<sub>i</sub> li juhoor-in doun ?an ?azida hu]

## 5.4 The dXP and clitic are not derivationally related

A particularly problematic aspect of the movement account is that no real gap is found in the clause hosting the clitic; instead, we find a weak pronominal. Although there are many ways to derive this under a movement-based analysis, they still fall short of accounting for CLLD I and CLRD I in MSA. This is the focus of next section, where I show that the dXP and the clitic are not derivationally related in any obvious sense: while the relation in CLRD I is one of cross-sentential cataphora, it is a cross-sentential anaphora in CLLD I. In what follows, I discuss three derivational treatments of CLLD I and CLRD I: clitic doubling, agreement and resumption, highlighting that they are untenable for the analysis of CLLD I and CLRD I in MSA.

### 5.4.1 CLLD I and CLRD I in MSA as doubling phenomena

An underlying assumption in the treatment of monoclausal approaches to dislocation is to propose that the relation between the dXP and its associated clitic



is mediated via a doubling operation. As noted in Preminger (2009: 619)

(a)cross many languages and constructions, it is common to find sentences in which a verbal argument is represented twice: once by a full NP, and once by a phonologically small morpheme. This morpheme matches the  $\phi$ -features of the full NP and is affixed either to the verb itself or to some member of the extended verbal projection (an auxiliary verb, a tense marker, or an aspectual marker)

Two operations have been identified in the literature which are argued to give rise to this configuration (i.e. doubling): agreement and clitic doubling. According to Kramer (2014: p.596 fn.5), although the two configurations are typically taken as a single phenomenon, there are cogent reasons to set them apart, a position which I assume here following Baker (2008) and Corbett (2006) among others. In what follows, I discuss in section 5.4.1.1 the proposal arguing for dislocation-cum-agreement, pointing out that this position is untenable for CLLD I and CLRD I in Arabic. The original observation is that clitics partaking in Arabic CLLD I and CLRD I cannot be taken as merely a bundle of features on the verb which are spelt out in the course of derivation, but they are full arguments instead, which are specified as such in the Numeration. I then turn in section 5.4.1.2 to one of the most celebrated accounts of dislocation: dislocation-cum-clitic doubling. The original observation of such approaches to CLLD I and CLRD I is that the dXP and the clitic form a single constituent at the beginning of the derivation; a proposal which is typically referred to as the ‘Big-DP analysis’. Despite the merits of this approach to dislocation, however, there are good reasons not to equate CLLD I and CLRD I in Arabic with Clitic Doubling (CD). Resuming the discussion adumbrated in section 4.4.1.1, this is attributed to the fact that (i) CD is not attested in MSA, and (ii) there are indeed well-known differences between CD and the phenomenology of dislocation to be reviewed shortly.

#### 5.4.1.1 CLLD I and CLRD I are not agreement

According to analyses of this ilk, clitics are morphological creatures which are base-generated in their surface position, just like other agreement markers (Borer 1984; Suñer 1988; Dobrovie-Sorin 1990; Kupula Ross 2012). In terms of Chomsky (2000, 2001)’s theory of Agree, this agreement relation can be conceived as a result of a probe-goal valuation: a head with (uninterpretable) unvalued features probes within its c-command domain in the search of a DP



with valued (interpretable) features. Therefore, if clitics in CLLD I and CLRD I are merely a bundle of features as per the morphological view, then they are spelled out as a result of an agreement operation. The most succinct, and indeed the first, view of the morphological approach to cliticization can be found in [Borer \(1984: 41\)](#) according to which clitics are:

the output of an inflectional rule which inserts number, gender and person features and associates them with an already existing Case feature on a lexical head. Clitics are a spell-out of Case features in the sense that once the Case feature is associated with the inserted number, gender and person features, it is given an independent phonological representation and can no longer be transferred to a complement of the head.

As it stands, this stance avoids a violation of the  $\theta$ -Criterion since the relevant  $\theta$ -role is not marked twice, and hence the  $\theta$ -Criterion is argued to be preserved (i.e. it is only the dXP that gets a  $\theta$ -role, since the clitic is taken to be a spell-out morpheme, which is realized post-syntactically). Moreover, this view presupposes that the relation between the clitic and the dXP in CLLD I and CLRD I configurations is derivational: they are derivationally related. Although the morphological analysis of clitics accounts nicely for why a violation of  $\theta$ -criterion would not ensue in CLLD I and CLRD I, there are good reasons however casting doubts on the plausibility of this approach to cliticization. My claim is that clitics in CLLD I and CLRD I in MSA are indeed full DPs contrary to the assumptions of the morphological view.

One of the pervasive topics in the syntax of dislocation in natural languages is the status of clitics in the A'-dependency; are they affixal or argumental? In addition to the former view, which is rooted in the morphological view, there is a syntactic view of cliticization according to which clitics are DPs, which are base-generated in argument positions. Their surface position is accounted for by assuming that they move from their positions to adjoin to their hosts, i.e., verbs ([Kayne 1975](#); [Philippaki-Warbuton 1987](#)). In fact, the analysis of Arabic clitics has been limited to this binary choice; some take the morphological path arguing that clitics are merely agreement markers which are devoid of argumental content ([Aoun 1993, 1999](#)). On the other hand, some treat clitics uniformly as bonafide arguments which bear a distinctive  $\theta$ -role ([Fassi Fehri 1993](#); [Musabhien 2008](#)). My proposal therefore is akin in spirit to the proposals of the second camp which treats clitics as argumental entities bearing  $\theta$ -roles in contrast to the morphological analysis of clitics.

Bresnan and Mchombo (1987) constitutes one of the first contributions to examine the structural differences between anaphoric agreement (i.e. corresponding to clitics in Arabic dislocation, as I shall argue) and grammatical agreement (i.e. corresponding to the pure agreement markers). To this end, they propose some diagnostics to set them apart. On the basis of these diagnostics, they conclude that subject markers in Chichewa, a Bantu language, are “ambiguously used for grammatical and anaphoric agreement”, while object markers are treated unambiguously as anaphoric agreement. I capitalize on their proposal, and argue that it provides evidence for the ‘argumental nature’ of clitics partaking in Arabic dislocation.

First, grammatical markers, in contrast to anaphoric markers, require a local relation with the element they are linked to. Hence, if the relation between a DP and coindexed clitic is not clause-bounded (i.e. it is not instantiated in the same clause), then the clitic in this scenario is an instance of anaphoric agreement (i.e. incorporated pronoun with a  $\theta$ -role). This exactly holds true for Arabic dislocation. In particular, the relation between the dXP and the clitic can be established non-locally in that the dXP and co-referential clitic belong to two separate clauses, as exemplified in (40).

- (40)    haḏa ʔlʔirahbi, galla alɟunudu    li qaʔdihim    ʔanuhm laa  
          this terrorist, said the soldiers to leader-their they    don’t  
          ystʔtauʃun alimsaka bi-hi.  
          can            catch        with him  
          ‘This terrorist, the soldiers told their leader they cannot catch him.’

Second, anaphoric agreement and grammatical agreement differ in their being able to partake in the domain of idiomatic interpretation. In particular, the retaining of idiomatic interpretation is impossible with anaphoric agreement since the reference of DPs associated with anaphoric agreement is recovered from the context (i.e. they can be interpreted as topics). On the contrary, the meaning of idioms is not established in a compositional fashion, and this means that they are independent of any context (i.e. and thereby they cannot be interpreted as topics). This observation, according to Bresnan and Mchombo (1987) points to the following conclusion which is verified with Chichewa’s subject marker: only grammatical agreement is possible with idiomatic interpretation since the DP linked with this grammatical marker need not be topic. As far as Arabic is concerned, Soltan (2007: p.56) notes that the idiomatic readings are not possible in Left Dislocation constructions as evidenced in (41a), where the idiom interpretation is lost, in contrast to idioms

partaking in non-Left dislocation constructions as in (41b), which prove to retain the metaphorical sense of the idioms, repeated from section 2.5.4.1.

- (41) a. al-busaaT-u sahb-tu-hu min tahti qadamay-hi  
the-rug-NOM pulled-1SG-it from under feet-DAT-his  
Literal reading only: "I pulled the rug from under his feet."  
b. sahb-tu al-busaaT-a min tahti qadamay-hi  
pulled.1SG the-rug-ACC from under feet-DAT-his  
Literal and Idiomatic: "I pulled the rug from under his feet."

Soltan's analysis for this divergent behavior of the interpretation of idioms builds on a highly stipulatory explanation proposed originally in Aoun and Benmamoun (1998) in that "while movement chains maintain the idiomaticity of an idiom, co-indexation chains do not" (Soltan 2007: 56). On the assumption of Bresnan and Mchombo (1987), however, the illicit idiomatic interpretation follows from an independently motivated explanation which is rooted in the structural composition of co-referential clitics. In other words, the lack of idiomatic reading in (41b) is attributable to the fact that the clitic in the lower clause is anaphoric agreement (incorporated clitic) which must be linked to a topic in the higher clause. But, topic interpretation is not possible in the domain of idioms for the simple reason that there is a contextual clash between idioms and topicality, in that the latter but not the former requires a context from which the DPs' references can be recoverable.

Finally, agreement markers and anaphoric markers can be set apart on the basis of the structural position in the clause structure. Only agreement markers are linked to elements which are necessarily in the domain of a predicate-argument configuration (i.e. internal to the (I)nflexional (P)hrase zone). This option, however, is not possible for peripheral elements which are associated with an anaphoric marker. If the peripheral element happens to co-occur with an anaphoric marker in the IP zone, we end up having two co-occurring arguments in the same clause. As such, this is a violation of the  $\theta$ -criterion and Chomsky (1965)'s Sub-categorization principle. The optimal solution for this therefore is to assume that the peripheral element stands in a position external to TP while its co-occurring clitic with argument status is internal to IP; presumably in the VP-complement position if it is a direct object.

Corbett (2006: 103f) proposes a battery of criteria to distinguish pronominal affixes (PA) from agreement affixes (AA); see Amer (2015) on Standard Arabic.

These criteria are as follows:<sup>7</sup>

**Case roles** According to this criterion, PAs are different from AAs in that the former can index all the main arguments of the relevant clause, contrary to the latter which is predicted to index only one argument. For example, the agreement operation in Amharic ([Kramer 2014](#): and references therein) allows only one object marker even if there are two internal arguments: the presence of two object markers gives rise to ungrammaticality. According to [Kramer \(2014: p.599\)](#), that both arguments in Amharic cannot be doubled at the same time is further evidence that the object marker in Amharic is an object agreement rather than a pronominal affix (in [Corbett's](#) terms).

- (42) \*Girma lä-Almaz mäs' haf-u-n sät't-at-äw  
Girma.M DAT-Almaz.F book-DEF.M-ACC give-(3MS.S)-3FS.O-3MS.O  
'Girma gave the book to Almaz'

This is not the case, however, with languages making use of pronominal affixes, where there can be two arguments being doubled at the same time.

- (43) ʔaʕtaa-n ii-hi  
gave.3MSG- me-it.ACC  
'He gave it to me' Classical Arabic ([Amer 2015](#): p.94)

- (44) tu to edhosa to vivlio tu jani  
3MS 3MS.ACC gave.1S the book.ACC the John.ACC  
'I gave the book to John' Greek ([Philippaki-Warbuton et al. 2004](#): 969)

**Degree of referentiality** This criterion states that PAs are more referential than AA. According to [Corbett \(ibid\)](#), "(t)his is a scalar criterion for analyzing verbal markers: the more referential they are, the stronger the case for treating them as pronominal affixes, and the greater the restrictions on referential use, the stronger the case for treating them as agreement markers". As far as clitics in Arabic are concerned, it is quite likely to treat verbal affixes as being referring to salient entities in the discourse. For example, the clitic 'hu' in (45) refers to some entity in the discourse which must be known to the hearer and the speaker.

- (45) qabalt-hu  
meet.1SG-him  
'I meet him'

---

<sup>7</sup>It should be pointed out that [Corbett's](#) pronominal affixes are equivalent to [Bresnan and Mchombo's](#) anaphoric agreement.

Under an agreement approach to cliticization, however, the referentiality of clitics is quite surprising. As it stands, what this suggests is that verbal clitics in Arabic are indeed argumental since they behave like full DPs, which are known to be referential elements.

**Multi-representation vs. uni-representation** This criterion refers to the possibility of co-occurrence of two elements for the sake of indexing a single referent. According to Corbett, PAs tend to be an ‘uni-representation, or dropping operation, whereby the occurrence of two elements referring to a single referent gives rise to unacceptable strings as in (46).

- (46) a. ??katabtu-ha (alqasidt-a)  
           wrote-1SG-it (the poem)  
           ‘I wrote the poem.’  
       b. ??(alqasidt-a) katabtu-ha  
           (the poem) wrote-1SG-it  
           ‘I wrote the poem.’

The sentences in (46) turn out to be acceptable, however, when the doubled element is either left or right-dislocated outside the confines of TP as shown in (47), the difference between (46) and (47) being the intonational break.

- (47) a. katabtu-ha, (alqasidt-a)  
           wrote-1SG-it the poem  
           ‘I wrote the poem’  
       b. alqasidt-a, katabtu-ha  
           the poem wrote-1SG-it  
           ‘I wrote the poem’

This means that the doubled element in Arabic cannot in any way co-occur with a similarly indexed element within the minimal TP. In other words, object clitics are in complementary distribution with full NPs in object position, but can be doubled by dislocated NPs. By contrast, AAs can be conceived of as a multi-representation/doubling operation, where the verbal affix ‘*at*’ for example can co-occur with the doubled element as in (48).

- (48) jaʔ-at        al-muʕlimat-u  
       came.3SG-F the-teacher-NOM  
       ‘The teacher came’

This evidence connects to a broader issue: when the doubled element co-occurs with the clitic in Arabic, the doubled element is taken to be an adjunct rather than an argument as shown in the previous chapter. This can be verified

by the fact that the dXP as in (49) can be omitted without inducing ungrammaticality, provided that the referent, represented here by the clitic *'hu'* must be known to the hearer; i.e., the common ground shared by the speaker and hearer must be rich enough to disambiguate the referent flagged by the clitic.

- (49) a. laygatu-hu, Zaydan  
meet-1SG-ACC Zayid-ACC  
'I met him, Zayd'  
b. laygatu-\*(hu)  
meet-1SG-ACC  
'I met him'

A particularly convincing piece of evidence for the argumental status of clitics in MSA is the fact that clitics in MSA affect binding relationships. As far back as [Chomsky \(1981\)](#), Principle A of Binding Theory mandates that anaphoric reflexives be bound by clause-internal antecedents. This is exemplified by the contrast in (50).

- (50) a. Khalid-un yuhibu nafas-a-hu  
Khalid-NOM loves.3SG self-ACC-his  
'Khalid loves himself'  
b. huwwa<sub>j</sub> saməʕa ʔinna Khalid-an<sub>i</sub> yuhibu nafas-a-hu\*<sub>j-i</sub>  
he heard.3SG that Khalid-ACC loves.3SG self-ACC-his  
'he heard that Khalid loves himself'

Binding relations are established, however, even if the anaphoric reflexive is bound by a clitic which can be taken as a clause-internal antecedent. This is verified in (51), where the reflexive element is bound by the clitic *'uu'*.

- (51) ar-rijaal-u 'ntagad-**uu**<sub>i</sub> anfus-a-hum<sub>i</sub>  
the-men-NOM criticized.3PL-they selves-ACC-their  
'The men, they criticized themselves' ([Musabhien 2008](#): 174)

Given the standard assumptions on Condition A of Binding Theory according to which a reflexive and its antecedent must be in a local domain, which is typically boiled down to the c-command domain of the closest c-commanding NP ([Chomsky 2000](#)), the resumptive pronoun in (51) *'uu'* is to be taken to be the closest c-commanding antecedent; it is even closer than the topical expression *'ar-rijaal-u'*. It should be noted moreover that this is not a quirk of MSA, but is attested cross-linguistically; see [Anagnostopoulou \(2003\)](#); [Harizanov \(2014\)](#) on Greek and Bulgarian respectively. Under an agreement account for cliticization, however, it is quite unlikely that the clitic in MSA can affect binding

relations for the simple reason that agreement is unable to affect binding relations: they are merely a bundle of (uninterpretable) features which do not refer neither change binding relations. According to [Rezac \(2010\)](#), if agreement is taken to be a pronoun-like phi-set on the verb, it would be expected to license the anaphor; this expectation is not born out though, as the examples in (52) show.

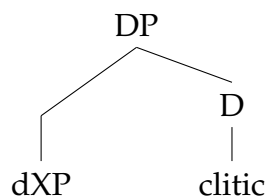
- (52) a. Some linguists<sub>i</sub>/They<sub>i</sub> seem to them(selves<sub>i</sub>)to have been given good job offers.  
 b. There seem to them(\*selves<sub>i</sub>)/\*each other<sub>i</sub> to have been some linguists<sub>i</sub> given good job offers.

[Rezac](#)'s explanation for this is in consonance with [Chomsky \(2000: 119\)](#), namely that agreement is "uninterpretable and deleted after Agree, so that it cannot bind at LF", on the assumption that Binding Conditions apply at LF.

#### 5.4.1.2 CLLD I and CLRD I are not Clitic Doubling

A prominent analytic strand adopted by some of the monoclausal approaches to dislocation is to assume that both CLLD I and CLRD I are instances of Clitic Doubling (CD). A theoretical tool to implement this is to posit a 'Big-DP' as the source of the dXP and its corresponding clitic ([Aoun et al. 2001](#); [Boeckx 2003](#)). The original claim is that the dXP and its associated clitic are base-generated within a maximal projection dubbed the 'Big-DP', which receives one  $\theta$ -role and is assigned one morphological case. According to one version of this analysis, the clitic is taken to be the head of DP, while the dXP is generated as the specifier of DP. In the course of derivation, the dXP undergoes movement leaving its corresponding clitic stranded where it is originally base-generated (i.e. the head of DP). This is exemplified in (53).

(53)



This approach to dislocation makes a straightforward prediction about connectivity effects, which are typically exhibited by CLLD I and CLRD I. For example, the reason why the dXP and the clitic covary w.r.t  $\theta$ -role and mor-



phological case is attributed to the assumption that the dXP and the clitic are generated in a Big-DP: a nominal projection which receives a distinctive  $\theta$ -role and morphological case. Moreover, this analysis accounts nicely for the movement status of CLLD I and CLRD I. In other words, under a movement account, one would expect a gap instead of a clitic. Under a Big-DP analysis, however, this objection fades away since the clitic is merged together with the dXP and simply stays behind when the latter moves, meaning that there is a (not-spelled-out) trace of the dXP plus the clitic in the base position. Notwithstanding, extending this approach to dislocation structures suffers from numerous flaws.

First, clitic doubling is not attested in MSA, contrary to other Arabic varieties; see [Aoun \(1981, 1999\)](#) on Lebanese Arabic and [Shlonsky \(1997\)](#) on Palestinian Arabic). This contrast between Lebanese Arabic and MSA is shown in (54)-(55).

- (54) Kari:m ji:f-o            la Sami  
       Karim saw.3SG-him to Sami  
       'Karim saw Sami' Aoun (1999)
- (55) \*Kari:m-un    raa?a-o        la Samy-an  
       Karim-NOM saw.3SG-him to Sami-ACC  
       'Karim saw Sami'

In (54), the clitic 'o' doubles the direct object 'Sami'; both of them share the same  $\theta$ -role, with the full DP occurring in the regular argument position. By contrast, MSA disallows this configuration except for one instance: when the doubled element is an adjunct being coreferential with the host clause via a pronominal clitic, in cases of CLLD I and CLRD I, as shown in the previous chapter. This conclusion is further reinforced by data from Yagui, an Uto-Aztecan language. In particular, while pronominal agreement for the 3rd person object argument is optional as in (56), the object agreement marker turns out to be obligatory when the direct object is right-dislocated (57).

- (56) Inepo Hose-ta    (aa)-vicha-k  
       1.SG   Hose-ACC (3.SG.OBJ)-see-PERF  
       'I saw Hose'
- (57) Aurelia \*(a<sub>i</sub>)        jikka-k [enchi    laaben-ta    pona-ka-'u]<sub>i</sub>  
       Aurelia 3.SG.ACC PERF    2SG.ACC violin-ACC play-PERF-CLM  
       'Aurelia heard it, that you played the violin'

[Haugen \(2008: 222-223\)](#)



That the corefrent dXP with a clitic is an adjunct can be verified by evidence from focus constructions. In particular, foci in MSA, typically interpreted in situ, cannot be doubled by clitics. As the following example illustrates, the clitic cannot cooccur with the focus DP (58c), the reason being that the clitic and the focus DP "compete for argumenthood when only one argument is allowed" ([Androulakis 2001: 94](#)); see also [De Cat \(2004, 2005\)](#) for similar data featuring Spoken French.

- (58) a. mʔn qabalta?  
who met.2SG  
'Whom did you met?'  
b. qablatu [ALI-AN]  
met.1SG ali-ACC  
'I met Ali'  
c. \*ALI-AN, qabaltu-hu  
Ali-ACC, met.1SG-him  
'Ali, I met him.'

In the same vain, if the dXP is contained in the question domain, it never shows up in the answer domain for the simple reason that it is redundant in the presence of an argumental clitic.<sup>8</sup>

- (60) a. ali-an ʔayyna qabalta-hu  
Ali-ACC where met.2SG-him?  
'where did you met Ali?'  
b. (\*ali-an) qabalta-hu fi ʔlsu:gi  
(\*Ali-an) met.1SG-him in the shop-GEN  
'(\*Ali) I met him in the shop'.

Second, as noted by [Cinque \(1990\)](#) and [Iatridou \(1995\)](#) among others, there are a number of languages, like French and Italian for example, which have CLLD I but not CD.

---

<sup>8</sup>As argued by [Rizzi \(1997\)](#), the left periphery of the clause is structured as containing a fixed cascade of functional elements: topics must precede linearly foci elements. This approach is shown to be problematic in the previous chapter, however, for it merely restates the observed data in technical terms, but without providing the rationale for why topics must precede focus. Interestingly, this ordering can be accounted for in a principled manner under the biclausal analysis ([Ott 2015: p.270](#)). In particular, by assuming that the dXP is a fragment originating in CP1, this means that it must precede the host clause containing the foci operator. This is shown in (59) below.

- (59) ʔayyna qabalta [CP1/TOPIC ali-an] ... [CP2/FOCUS ʔayyna] qabalta-hu.

- (61) a. Gianni, lo conosciamo  
           Gianni him we know  
       b. \*Lo conosciamo (a) Gianni  
           Him we know Gianni  
           ‘We know John’ (Cinque 1990: 61-62)

Indeed, this is the case in MSA as shown earlier. On the assumption that CD is the source of either CLLD I or CLRD I, one would predict that the presence of CLLD I and CLRD I is contingent cross-linguistically on CD, contrary to fact. Therefore, it seems worthwhile at this point to align myself with the tentative generalization advocated by [Schneider-Zioga \(1994: 195\)](#) according to which

if a language has [CD], then it has [CLLD I], but not the reverse necessarily. That is, we cannot with confidence predict anything about the existence of [CD] in a language just from knowing that the language has [CLLD I]; but if we know a language has [CD], we can accurately predict that it has [CLLD I].

Third, even if one assumes, for the sake of the argument, that CD is indeed the basis of both CLLD I and CLRD I—see [Alexopoulou \(1999: 124f\)](#) for an analysis that CLLD I is amenable to a CD analysis—one thus has to stipulate the reason why CLLD I and CLRD I are not subject to one of the prominent features of CD, *viz.*, Kayne’s generalization according to which “clitics absorb Case and, accordingly, clitic doubling is only possible in languages with special prepositions which can license Case on the doubled object” ([Anagnostopoulou 2006: 521](#)).<sup>9</sup>

The kind of preposition differs from language to language: *a* in Spanish, *pe* in Romanian and *la* in Lebanese Arabic. By way of illustration, consider the example in (62) featuring CD in Lebanese Arabic and Rioplatense Spanish respectively, which are taken as true instances of CD since they employ a

---

<sup>9</sup>I am aware that this generalization has prominent exceptions, Greek (and all Balkan languages which are argued to have CD) being the most recalcitrant cases to this effect. As noted by [Anagnostopoulou \(2006: 545\)](#), doubling in Greek is blocked in the presence of a preposition as the following sentence shows:

- a. \*Tu       edhosa   to vivlio       s-ton Jani.  
      CL-GEN gave-1SG the book-ACC to-the John  
      ‘I gave the book to John.’

I cannot examine properly (let alone) solve this issue here. Instead, I assume, in line with [Cornilescu and Dobrovie-Sorin \(2008: 304\)](#), that this generalization should not be abandoned because it covers widely attested cross-linguistic data.

preposition typically preceding the doubled element in line with Kayne's generalization.

- (62) a. Kariim sheef-o la Samii  
Kariim saw-him to Samii  
'Karim saw Saamii' Aoun (1993: 711)
- b. La oian a la nina.  
ACC listened-3PL a the girl.ACC  
'They listened to the girl' Anagnostopoulou (2006: 521)

Fourth, CD is known to be restricted to semantic and interpretational classes which CLLD I and CLRD I are not (Schneider-Zioga 1994; Anagnostopoulou 2006; Suñer 1988; Fernández-Sánchez 2017). For example, the doubled element in typical CD must be animate and specific in Spanish. The following example illustrates that CD with animate elements in Spanish as depicted in (63a) is totally fine, contrary to CD with inanimate elements as exemplified in (63b), which incurs a grammaticality violation.

- (63) a. [a Juan] lo-vimos  
We see John'
- b. \*lo-vimos [el/al libro]  
CL.ACC. M-see.1P to the book  
'We see the book'

This is not the case for CLLD I and CLRD I in MSA, since this language tolerates dislocating (in-)animate elements. By way of illustration, consider the examples where inanimate elements can be CLLD I-ed as in (64a) and CLRD I-ed as in (64b).

- (64) a. al-kitab-a qaratu-hu lilta al-barihata  
the book-ACC read.1SG-it-ACC night yesterday  
'I read the book last night'
- b. qaratu-hu lilta al-barihata, hatha alkitabu  
read.1SG-it-ACC night yesterday, this book  
'I read the book last night'

Fifth, adopting the Big-DP hypothesis poses an undergeneration problem. In particular, clitic doubling is operative with a lexical restriction inasmuch as it must involve DPs (Samek-Lodovici 2006; López 2009). This is not the case, however, for CLLD I and CLRD I from a cross-linguistic perspective as shown in chapter 2. The following data point out that CLLD I-ing and CLRD I-ing prepositional phrases, as in (65a) and (65b) respectively is possible.

- (65) a. [PP Al mare], ci siamo già stati  
to the seaside there (we) have already been  
'We have been already in the seaside' Italian (Cinque 1990: p.57)
- b. Ne ho parlato a Luisa, [PP di quella faccenda]  
of it have spoken to Luisa of that matter  
'I have spoken to Luisa about that matter.'

Italian (Samek-Lodovici 2006: p.688)

As rightly noted by López (2009: 272ff), in order to mould these data to fit the Big-DP hypothesis, one has not option but to propose a patch-up treatment to accommodate Big-APs, Big-PPs etc. Interestingly, under the biclausal analysis, this is just expected: there is not a lexical restriction on the kind of the dXP, as long as this element can be anaphorically or cataphorically related to an argumental pronoun in the host clause. This connects to a broader issue, which was examined in some detail in chapter 3: the assumption that contrastive QPs and indefinites can be CLLD I-ed in Arabic. More specifically, the occurrence of these elements in Arabic CLLD I is just expected: they can be anaphorically related to argumental pronouns. This crucially confirms my conclusion discussed in chapter 3 that it is the contrastive reading of atypical topics which can restrict the domain of their quantification. As far as CLRD I is concerned, these elements are barred for independent reasons having to do with information-structural reasons, independently of a lexical restriction (i.e. they cannot be interpreted as contrastive foci).

Finally, the Big-DP hypothesis has to say something about semantic interpretation. In particular, as noted by Salzmann (2017: 216, due to Gereon Müller), if the dXP undergoes movement, as per the Big-DP hypothesis, one would predict that this operation would leave a variable, which is concomitant with a resumptive clitic. As such, this state of affairs gives rise to "the danger of too many variables". Overall, this is a general problem that a Big DP-induced analysis of CLLD I and CLRD I has to face. This has already been examined in section 4.3.2.1 (Elbourne 2005).

#### 5.4.2 CLLD I and CLRD I are not resumption

I briefly discuss another derivational/monoclausal approach to clitic-resumed dependencies: the assumption that these configurations are instances of resumption (Demirdache 1991; Sturgeon 2008). This position is untenable, though. To explain why, two arguments are in order. First, on the assumption that resumptive pronouns are subject to Principle B of Binding Theory (McCloskey

2006), their binding is subject to an anti-locality requirement; see ‘Highest Subject Restriction’ in McCloskey (1990, 2006: 102f). The original observation is that a pronoun and its antecedent cannot co-occur in the same local domain as in (66), from McCloskey (2006: 102)

- (66) a. \*Charles<sub>i</sub> is proud of him<sub>i</sub>.  
 b. \*Each actress<sub>i</sub> nominated her<sub>i</sub>.

The ungrammaticality of (66a) and (66b) is accounted for by assuming that the pronouns are regulated by Condition B of Binding Theory: they are subject to a disjointness requirement according to which pronouns cannot be joint in reference with a local binder (i.e. pronouns must be free in the local domain, which is taken to be the Complete Functional Complex, or Inflectional Projection ‘IP’). This is not the case with CLRD I in MSA, however, which is subject to locality effects as adumbrated in chapter 2, and hence it does not matter whether or not the dXP is local relative to the clitic. In other words, structural proximity between the dXP and the clitic is not counted for the sake of the computation of Principle B violations in CLRD I structures in MSA. This connects to another issue having to do with the ability of resumptive pronouns to rescue constructions involving islands. In particular, a canonical feature of resumptive pronouns, or ‘intrusive pronouns’ in the sense of Sells (1984), is that they may salvage constructions containing islands. According to Boeckx (2003), extraction from islands is blocked only when the extracted element leaves a gap, whereas island effects fade away in configurations with resumptive pronouns.<sup>10</sup> Once again, this state of affairs is not compatible with CLRD I in MSA, which show sensitivity to islands. More on island (in)sensitivity in section 6.4.3.2. Second,

<sup>10</sup>To be more precise, this is only the starting point of Boeckx’s analysis (ibid.), where he argues that all cases of resumption are uniformly derived by movement and involve the stranding of the resumptive pronoun, in consonance with the Big-DP hypothesis. As shown earlier, there are some problems, however, which this line of reasoning has to face. In fact, the idea that resumption neutralizes island effects has figured in the literature. For example, Prince (1998) argues that one of the functions of Left Dislocation is to escape islands constraints, “where the speakers salvage the situation by leaving a resumptive pronoun in situ”. This claim, however, does not go unchallenged. Alexopoulou and Keller (2007) for example investigate the behavior of *wh*-extraction in three languages (i.e. English, Greek and German) under three conditions: a strong island (relative clauses), a weak island (whether-clauses) and a non-island (that-clauses). The results showed, contrary to the received belief, that “resumption does not remedy island violations” (ibid, 110). Building on this work, Heestand et al. (2011) tackle this issue in a paper of a self-explanatory title, “*Resumption Still Does Not Rescue Islands*”, where more sentential islands have been tested in both declarative and *wh*-contexts. As shown in chapter 2, resumption in MSA rescues islands only in CLLD I, to the exclusion of CLRD I. Crucially, this should be understood with the proviso that this discrepancy is not amenable to a movement-construal analysis, but to a discursive factor to be examined in section 6.4.3.2.

as noted originally by Merchant (2004b), the binders of resumptive pronouns typically appear caseless; see Merchant (2004b) for a long list of languages exhibiting this pattern. This is not the case however with CLLD I and CLRD I in MSA as we have seen in earlier: the dXP and the clitic must share the same morphological case.<sup>11</sup>

## 5.5 Conclusion

The aim of this chapter has been to examine the consequences of analysing CLLD I and CLRD I in MSA as biclausal configurations: the dXP is taken as a remnant of a PF-reduced clause. The impetus for this analysis is what is referred to in the literature as Cinque's paradox, where CLLD I and CLRD I prove to display the properties of movement and base-generation at the same time. This bizarre state of affairs is typically captured by mere stipulation as I argued in some detail in the previous chapter. Against this background, the analysis put forward in this chapter aspires to go about this paradox and derive the clashing properties of CLLD I and CLRD I from three well-motivated operations in natural languages: cataphora/anaphora, ellipsis and coordination; the constellation of which gives rise to the standard CLLD I and CLRD I. In a sense, CLLD I and CLRD I, which are typically taken to be purely monoclausal configurations, are indeed artifact phenomena comprising of some interacting mechanisms. Therefore, to the extent that this analysis is on the right track, the terms CLLD I and CLRD I must be called into question as well. In particular, it is tempting at this point to relieve the theory of grammar from unmotivated constructions by deriving them from independently motivated operations. More bluntly, there is no such a thing as CLLD I or CLRD I.

The proposed analysis moreover obviates the need to equate CLLD I with either resumption (Demirdache 1991), Clitic Doubling (CD) (Cecchetto 2000) or agreement (Kupula Ross 2012). For one thing, binders of resumptive pronouns are not case-marked (Merchant 2004b). This is not the case, however, with CLLD I in MSA where the dXP must be case-marked and match the case-marking of the correlate. Likewise, assimilating CLLD I to CD, as in Big-XP analyses, does not seem to be on the right track either. The original observation

---

<sup>11</sup>One caveat is in order. The last argument is taken by Merchant (2004b) as an indication that the relation between the resumptive pronouns and their binders is not mediated by syntactic movement: the binder is derived by base-generation. This position cannot be maintained, though, given the facts alluded to earlier that CLLD I and CLRD I in MSA display the properties of movement.

is that there are well-known properties exhibited by CD (cf. Anagnostopoulou 2006), but not displayed by CLLD I in MSA. One of these differences, among many others, is that the doubled element in CD must be [+animate] as in Spanish, contrary to the dXP in MSA which is not subject to this restriction. Further, the current proposal excludes the possibility that CLLD I in MSA can be a case of agreement. For one thing, among many others, clitics according to the current analysis are argumental pro-forms, as in (Kayne 1975). A consequence of this is the fact that clitics in MSA can affect binding relationships. Under an agreement account for cliticization, however, clitics do not affect binding relationships.



# Chapter 6

## The Elliptical Analysis: Miscellaneous Issues

### 6.1 Introduction

So far, I have examined the consequences of analyzing CLLD I and CLRD I in MAS by recourse to the biclausal narrative. To recap, I argued that CLLD I and CLRD I in MSA are best viewed as having a biclausal structure whereby there are two identical sentences modulo the clitic and the dXP. The dXP is the surface fragment of backward clausal ellipsis, which is implemented at the phonological form of the grammar.

The main aim of this chapter is to discuss the technical implementation of the biclausal analysis. This chapter is structured as follows. Section 6.2 takes up ellipsis and information structure. Section 6.3 discusses how the proposed analysis can account for the prosody of CLLD I and CLRD I. Section 6.4 takes up the question of ellipsis and locality, Section 6.5 concludes.

### 6.2 Ellipsis and information structure

Ellipsis in fragment answers is standardly assumed to remove presupposed (i.e. given) elements and retain focal material. Put otherwise, remnants are typically interpreted as focused elements ([Merchant 2004a](#); [Brunetti 2003](#)).

- (1) Question: What did he eat?  
Answer: [<sub>F</sub> cake]

Under the mainstream literature on clausal ellipsis, the derivation of frag-

ment answers of the sort depicted in (1) is typically analyzed as involving focus movement of the remnant (i.e. *cake*) to the left periphery, followed by deletion of the TP, which is typically taken to be given information.

(2) [CP *cake<sub>i</sub>* [~~TP *he eat t<sub>i</sub>*~~ ]]

At first sight, this analysis strongly militates against the biclausal analysis, since the dXPs, if taken to be remnants, would be predicted to be focal. This is really problematic, given the fact that the dXPs partaking in the computation of CLLD I and CLRD I are typically interpreted as given elements, not focal ones denoting purely new information. This tension is apparent, though. To explain why, I provide two arguments in favor of the presupposed status of the dXPs in MSA under the biclausal analysis. First, a crucial property of CLLD I and CLRD I in MSA is the use of a weak pronominal in the host clause (i.e. clitic). This gives rise to the widely-held claim that clitics are unable to be associated with interrogative contexts under the standard assumption that *wh*-words are focal operators. This is due to the anaphoric sense of clitic in MSA, (and indeed this holds true for weak pronouns in all languages, as noticed by Peter Ackema p.c.): they are not employed out of the blue, but they must be used in the presence of a salient antecedent in a previous context (Rizzi 1997). In other words, the use of clitics entails the ‘given’ nature of CLLD I and CLRD I articulations under the biclausal analysis. By way of illustration, consider the question-answer pair in (3) (The symbol [?] denotes infelicity).

- (3) a. *maḏa faʕlta bi alkitubi-i?*  
       what did with the books  
       ‘what did you do with the books?’  
       b. ? *kitabu alʕiri, qaratu-hu lilta albarihati*  
           The book of poetry, read it last night  
           ‘I read-1p the book of poetry last night’  
       c. ?*qaratu-hu lilta albarihati kitabu alʕiri*  
           read-1SG it last night, the book of poetry.  
           ‘I read the book of poetry last night’

The infelicity of (3b) and (3c) featuring CLLD I and CLRD I in MSA respectively, is readily accounted for by assuming that the accusative clitic cannot refer to the ‘*kitabu alshʕiri*’ (the book of poetry), since this element is not contained in the domain of the preceding context. See Fernández-Sánchez (2017, 2020) for a similar observation.

Second, one of the main questions which generate a great deal of interest in

the literature on ellipsis is the question of identity: what kind of identity must hold between the elided clause and its antecedent. In fact, the literature on ellipsis is replete with clashing views on the question of identity: while some argue that the elided clause must be syntactically identical to its antecedent, some argue for a semantic identity. There is one camp, however, arguing for the hybrid approach where both syntactic and semantic identity is required; see [Van Craenenbroeck and Temmerman \(2019\)](#) for discussion. For the purposes of this thesis, I would assume, following [Ott \(2015\)](#) and [Fernández-Sánchez \(2017, 2020\)](#), that the relevant identity condition is semantic: in order for ellipsis to be licensed, CP1 and CP2 must be semantically parallel. By semantic parallelism, I assume that the propositions denoted by CP1 and CP2 are truth-conditionally identical, which means they are regulated by the relation of mutual entailment ([Merchant 2001](#); [Ott 2015](#)). To illustrate this relation, consider the following example (4) featuring CLLD I and CLRD I in MSA, the elliptical representations being exemplified in (5).

- (4) a. ali-an, h?yatu-hu  
Ali-ACC greeted.1SG-him.ACC  
'I greeted Ali.'
- b. h?yatu-hu ali-an  
greeted.1SG-him.ACC Ali-ACC  
'I greeted Ali.'
- (5) a. [<sub>CP1</sub> ~~h?yatu~~ aliy-an ] [<sub>CP2</sub> h?yatu-hu]  
b. [<sub>CP1</sub> h?yatu-hu ] [<sub>CP2</sub> ~~h?yatu~~ aliy-an]

The denotation of CP1 and CP2 given in (6) and (7) shows that the two CPs are mutually entailing ( $\Leftrightarrow$  denotes mutual entailment).

- (6)  $[[CP1]] = h?yatu\ aliy-an_i \Leftrightarrow [[CP2]] = h?yatu-hu_i$  CLLD I
- (7)  $[[CP1]] = h?yatu-hu_i \Leftrightarrow [[CP2]] = h?yatu\ aliy-an_i$  CLRD I

With this in mind, let us tackle the information-structural paradox attested for CLLD I and CLRD I under the biclausal analysis. In particular, the apparent new information denoted by dXPs is actually masked by the semantic parallelism proposed earlier; indeed there is a slight wrinkle here. In particular, recall that I propose in section 5.2.3 that the relation between CP1 and CP2 is regulated by 'specifying coordination', which means that the elided clause expresses a semantic specification of the antecedent clause by providing a specific/contrastive referent to the dXP's coindexed clitic. In light of this, the dXP

in the elided clause in this sense introduces new information (i.e. foci), but is "embedded within an overall backgrounding domain" (De Vries 2007a) (i.e. 'CP1' for CLLD I and 'CP2' for CLRD I). In (4), for instance, *aliy-an* 'Ali' provides specifying/new information w.r.t the host internal clitic *hu* 'him', giving rise to the semantic asymmetry required for the computation of specifying coordination. A possible paraphrase of (4a) and (4b) is: *as far as Ali is concerned, I greeted him* (De Vries 2007a). A corollary of this is the fact that the dXP must be more specific than its clitic for a felicitous dislocation. By way of illustration, consider the example in (8), where the clitic is dislocated instead of the DP.

- (8) \**hu*,            *h?yatu aliy-an*  
           him.ACC greeted.1SG Ali-ACC  
           'I greeted Ali.'

The resulting string is indeed downright ungrammatical. In addition to the fact that the clitic needs a verbal host to merge with, the ungrammaticality can be accounted for in discursive terms: the dXP must specify the clitic.

### 6.3 A (very short) note on the prosody of dislocation

I highlight in this brief section how the prosodic peculiarity of CLLD I and CLRD I in MSA straightforwardly follows from the biclausal analysis assumed in this chapter. One of the typical, and rather highly delicate, features characteristic of dislocation constructions is that the dXPs are prosodically independent of the host clause to which they are anaphorically related (Rizzi 1997; Feldhausen 2010; Janse 2008). This prosodic independence of the dXPs in dislocation is typically represented by a comma signalling a break in the intonational contour of the sentence, which is argued to be attested in parenthetical expressions, appositives, nonrestrictive relatives and question tags (Selkirk 2005; Ott 2015). According to this prosodic approach to the phenomenology of dislocation, the dXPs are taken to form an independent Intonational Phrase (IP): an IP in syntax corresponds to a Intonational Phrase at PF (Nespor and Vogel 1986; Frascarelli 2000); see also Selkirk (2011)'s Match theory (the principle *MatchClause*). This prosodic unit is taken to be equated with root clauses (Hamlaoui and Szendroi 2017); see Feldhausen (2010) for a more fine-grained prosodic analysis of CLLD I and CLRD I in Catalan. By way of illustration, consider the following examples featuring CLLD I and CLRD I in MSA in (9a,

10a), and their prosodic counterparts in (9b,10b) (IP stands for Intonational Phrase).

- (9) a. aliy-an, h?yatu-hu  
 Ali-ACC greeted.1SG-him.ACC  
 'I greeted Ali.'  
 b. PF= (IP h?yatu aliy-an) (IP h?yatu-hu)
- (10) laygatu-hu, Zaydan  
 met.1SG-him.ACC, Zayd-ACC  
 'I met Zayid.'  
 a. PF= (IP laygatu-hu) (IP laygatu Zaydan)

As can be seen, the dXP is mapped onto a separate prosodic domain to account for the assumption that the dXP is separated from the host clause by an intonational break, characteristic of non-integrated elements; see [Shaer and Frey \(2004\)](#); [Shaer et al. \(2009: p.6\)](#), on the differences between integrated and non-integrated elements in the context of dislocation. This is not the case, however, with genuine cases of Clitic Doubling according to which the doubled XP is parsed prosodically in the same intonational phrase as the clitic. As it stands, the prosodic independence of the dXPs in CLLD I and CLRD I in MSA is surprising under a monoclausal analysis, which needs ancillary assumptions to derive this independence from a prosodic perspective. Under the biclausal analysis, however, this behavior is just expected: the dXP is external to the host clause and hence it is not predicted that it partakes in the prosodic composition of that clause. This follows straightforwardly from the assumption that syntactic clauses are mapped into intonational counterparts. Another way to derive the independence of dXPs is to assume that this is a corollary of specifying coordination: it is a feature of this relation to mark "a new intonation contour", and "possibly [interrupt] the contour of the host clause" ([De Vries 2007a: 242](#)). Put otherwise, since the dXP is merged in a different conjunct from the one containing the clitic, it follows then that this would yield a prosodic independence.

The issue is more complex than it appears, though. In addition to the possible interspeaker variation alluded to earlier, some authors note that the dXPs do not project independent intonational phrases on their own. For instance, [Frascarelli \(2000: p.46\)](#) puts forward a universal generalization according to which "a Topic is minimally and exhaustively contained in [an intonational phrase]. [Downing \(2011: 779\)](#), in turn, rejects this conclusion arguing that this

generalization makes wrong predictions for left dXPs in embedded clauses in Bantu, which can be phrased together with the host clause. Likewise, although [Truckenbrodt \(2015: 327\)](#) argues that CLRD I is biclausal, whereby the dXP is a remnant of clausal ellipsis, he contends that the dXP does not form an intonational phrase. His line of reasoning goes that the boundary of an intonational phrase is demarcated by where sentence stress is assigned. Since no stress is assigned to the dXP in CLRD I, this means that the dXP cannot project an intonational phrase on its own. The underlying rationale for [Truckenbrodt's](#) position is in line with [Selkirk \(2011\)](#) in that “(s)peech acts regularly do seem to require separate phrases”. In short, the relationship between speech acts and intonational phrases is a kind of a cause-consequence relation. Pending further research, I submit in this thesis to the idea that the dXP is mapped onto a separate prosodic domain on the assumption that it is separated from the host clause by an intonational break.

To sum up, the biclausal approach to CLLD I and CLRD I, delicate though, can shed new lights on the syntax-phonology interface w.r.t how the dXP is mapped prosodically relative to the host clause which hosts the clitic. Generally speaking, the current analysis makes perfect predictions on the prosodic independence of the dXP in the context of CLLD I and CLRD I in MSA: it belongs to a root clause, which is subsequently mapped into a separate prosodic unit in the phonological component of the grammar. Nonetheless, more work needs to be undertaken to investigate this matter in more detail.

## 6.4 Ellipsis and movement

### 6.4.1 What licenses ellipsis

A prominent question in the literature on ellipsis is the so-called ‘licensing question’: how are the elliptical structures licensed? The licensing question specifies (i) what kinds of heads, positions or structures, which allow for ellipsis to happen, and (ii) what are the locality conditions underlying the relation between the elliptical sites and their non-elliptical counterparts ([Merchant 2019: p.21](#)). One way to implement this licensing condition is to assume, as I show in earlier, that in order for ellipsis to be licensed, both elliptical and non-elliptical structures must be semantically parallel. However, this position can be confounded by offending cases, where it seems that the ‘semantic identity condition’ breaks down. A case in point is sluicing: a type of ellipsis which in-

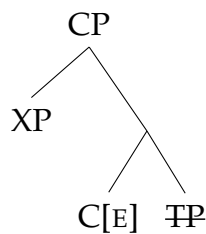
volves deletion of "a syntactically complete *wh*-interrogative, to the exclusion of the *wh*-expression" (Vicente 2019: 479). Particularly, it has been noted that there is a discrepancy in licensing cases of sluicing: while sluicing is fine with interrogatives (11a), it is blocked in the context of the relative clauses (11b); (Lobeck 1995; Merchant 2001; Fortin 2007).

- (11) a. Somebody has called me, but I do not know who ~~called me~~.  
 b. \*Somebody has called me, but I do not know the person who ~~called me~~.

As can be seen, in the minimal pair in (11), the elliptical clause is semantically parallel to the non-elliptical clause; nonetheless, the derivation in (11a) yields a grammatical string, contrary to (11b).

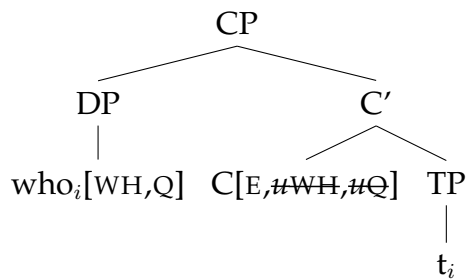
To go about this bizarre situation, there are many attempts on the market to resolve this discrepancy, the most detailed of which being Merchant (2001: p.54f) and Merchant (2004a: p.670). In particular, Merchant, inspired primarily by Lobeck (1995), argues that ellipsis is triggered by a feature dubbed [E]llipsis-feature. For clausal ellipsis to be licensed, [E] must be present on the C-head. At the phonological component of the grammar, [E]-feature directs the phonology to not spell out the complement of the head bearing it (i.e. TP). This is represented in (12). See also Fernández-Sánchez (2017, 2020).

(12)



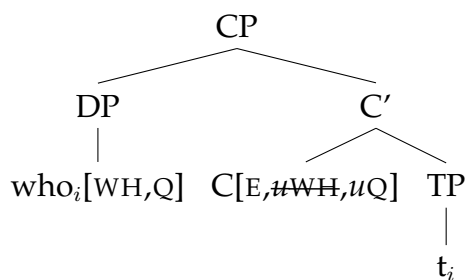
The original solution to resolve the discrepancy between the minimal pair of the sort depicted in (11), is to argue that the [E] is further specified by a feature-matching requirement: strong/uninterpretable [WH] and [Q] features. Since these features are strong in the sense of Chomsky (1995) and subsequent work, they must be checked overtly, giving rise to an overt movement of a *wh*-phrase out of a TP.

(13)



Relatives, however, are specified only with a [WH] feature, to the exclusion of [Q] feature. As such, movement in relatives will render the [Q] feature of [E] unvalued, giving rise to crash at LF. This is how Merchant accounts for the contrast in (11).

(14)



Despite that it is widely adopted, and its currency cannot be ignored, a feature-based account of ellipsis as in Merchant (2001, 2004a) has been criticized, rightly I believe, on several grounds. For one thing, this approach to ellipsis merely restates the conditions on ellipsis in technical terms, but without providing the rationale for why “particular functional heads license ellipsis other than the fact that they bear the [E]-feature” (Murphy 2016: p.3); see also Thoms (2010) for a view along these lines. In a sense, the [E] feature can be taken as a “descriptive device” lacking in explanatory power (Ott and Struckmeier 2016: 226). This is evident from the way Merchant deals with the discrepancy between interrogative and relatives under sluicing. As shown earlier, this discrepancy is dealt with by recourse to an *ad hoc* patch-up, where it is stipulated that while the [E] feature is specified for strong features: [WH] and [Q] in interrogatives, it is only specified for [WH] in relatives. The question is why the relatives cannot be specified for [REL]ative feature, just like the [Q] feature, which is thought to underlie the grammaticality of interrogatives under sluicing as shown in (78) (Fernández-Sánchez 2017). Even worse, under a feature-based analysis of ellipsis, it is predicted that the E-bearing head will be obligatorily present to trigger ellipsis. This prediction is not born out, as shown by (Ott and Struckmeier 2018: p.401, fn.8), where C-heads in sluicing



must undergo deletion (cf. *I saw someone.* - *Who (\*did)?* ).

## 6.4.2 Movement And Deletion Approach: MADA

An old problem, which has been left open since at least [Morgan \(1973\)](#), is the so-called ‘non-constituent ellipsis’. Under this view, the answer in (15b) is derived from the sentence of which the sequence *I am drinking* undergoes deletion at some point of the derivation ([Valmala 2007](#)).

- (15)    a.    What are you drinking?  
          b.    ~~I am drinking~~ water

Although this solution is elegant to the extent it can account for the thematic and case properties of the fragment *water* (i.e., it gets case and a thematic role by virtue of its relation with the deleted strings), it runs counter to what it seems to be a standard assumption in syntactic theorizing, *viz.*, syntactic operations target constituents. To circumvent non-constituent ellipsis, [Merchant](#) maintains that the derivation of ellipsis involves two processes: (i) the remnant (i.e. the element which escapes the domain of ellipsis) undergoes movement to the left periphery, and then (ii) the whole clause, where the remnant is generated, undergoes deletion; see [Merchant \(2004a\)](#); [Weir \(2014\)](#) a.o. According to [Merchant \(2004a: p.674\)](#), non-constituent ellipsis is barred under this analysis for principled reasons; particularly, under the assumption that ellipsis is triggered by the [E] feature occurring on a head, non-constituent ellipsis is not even a possibility since deletion under this analysis obligatorily targets a full-fledged constituent (i.e. the TP complement).<sup>1</sup>

### 6.4.2.1 Problems for MADA

Having discussed the internal makeup of what licenses ellipsis as per the PF approach to ellipsis, a pressing question comes up: is movement an essential condition for felicitous deletion as claimed by the practitioners of the PF approach? In fact, adopting this line of reasoning has non-trivial consequences.

---

<sup>1</sup>As many scholars note, the very notion of ‘non-constituent ellipsis’ is spurious, since this configuration can be derived by successive application of constituent ellipsis ([Sailor and Thoms 2014: 361](#)); see also [Griffiths \(2015: 47ff\)](#) for a view along these lines. A sophisticated analysis in this respect is maintained by [Ackema and Szendrői \(2002\)](#). In particular, inspired by [Williams \(1997\)](#)’s treatment of non-constituent ellipsis, these scholars argue for a mechanism dubbed ‘dependent ellipsis’. To show how this mechanism works, consider the example in (a); *apud* [McCawley \(1993\)](#) cited in [Ackema and Szendrői \(2002: 190\)](#).

- a.        The duck is dry and ~~the~~ mussels ~~are~~ tough.

First, this approach overgenerates in that it predicts that the movement operation that is supposed to occur in elliptical clauses should also be possible in non-elliptical ones (Valmala 2007; Griffiths 2019). Put otherwise, there is a discrepancy between elliptical and nonelliptical configurations; unexpected conclusion. By way of illustration, consider the following example from MSA.

- (16) a. mað iʃtra            aliy-un?  
           what bought.3SG Ali-NOM  
           'What did Ali buy?'  
       b. sayrattan byadda<sub>i</sub>    Ali-yun iʃtra t<sub>i</sub>  
           car-ACC    white-ACC Ali-NOM bought.3SG  
           'a white car'  
       c. \*sayrattan<sub>i</sub> byadda    Ali-yun iʃtra t<sub>i</sub>  
           car-ACC    white-ACC Ali-NOM bought.3SG  
           'Ali bought a white car'

As can be seen, there is a contrast in grammaticality between elliptical and nonelliptical forms. In particular, the derivation of (16b) involves movement of the fragment *sayrattan byadda* to the left periphery, coupled with TP ellipsis. If the same operation is applied, to the exclusion of TP ellipsis, this results in an ill-formed derivation as in (16c), suggesting that the focal elements in MSA do not front as answers to questions. This state of affairs is anathema to MADA, according to which fragments must undergo movement across the board, rendering the discrepancy between (16b) and (16c) inexplicable. Crucially, this critique has been echoed cross-linguistically; Weir (2014: p.8) on English and Stainton (2005: p.106) a.o.

A related problem attested for MADA from a cross-linguistic perspective

---

The sentence in (a) features 'determiner sharing': a phenomenon in English coordinate constructions, where the determiner of a DP (i.e. 'the' in the second conjunct) can undergo deletion under identity with the corresponding determiner of the first conjunct. According to Ackema and Szendrői, this phenomenon can be derived by means of multiple application of ellipsis processes (i) coordinate ellipsis, and (ii) dependent ellipsis. What is relevant is that Ackema and Szendrői's proposal can be *interpreted* as a case against a non-constituent coordination, that is, given coordination is symptomatic of constituency (Carnie 2011: p.90), a non-constituent coordination is illusory, and the 'apparent' cases of non-constituent coordination as in (a) should receive an alternative analysis, which is rooted in the 'dependent ellipsis' mechanism. Crucially, this type of ellipsis involves an identity relation between two conjuncts, the denotation of elided materials in (a) being recovered at the LF stage of the derivation, rendering the notion of non-constituent coordination obsolete. It should be noted, though, that this is not the essence of Ackema and Szendrői's proposal; this broad interpretation is an attempt to mould their analysis for the current purposes. According to Peter Ackema (p.c), this analysis, which was built around a particular analysis of elision of heads in coordinations (gapping), cannot be extended to a case like (15) in a straightforward way. Notwithstanding, I think that this analysis is still a promising way to look at non-constituent ellipsis. Given the fact that this issue is beyond the scope of the current work, I will leave it to future research.

is that there are elements which can behave as fragments; nonetheless, they cannot be fronted (Valmala 2007; Weir 2014; Fernández-Sánchez 2017, 2020). Consider the following conversation featuring MSA, where the response in (17b) cannot be derived from the source in (18); namely, the same string as in (18) without ellipsis is ungrammatical.

- (17) a. hal kaant tʔlbasu fustan-an abyadd-an  
Q [was] wear cloth.ACC white.ACC?  
'Was she wearing white clothes?  
b. laa, [bal] asswad-an  
No, [evidently] black.ACC

- (18) \*asswad-an<sub>i</sub> kaant tʔlbasu fustanan i<sub>i</sub>

The same observation carries over to English. For example, Griffiths (2019: p.26) cites examples showing that bare transitive verbs and prepositions are "immovable in English topicalization contexts" as in (19); nonetheless they can be felicitous fragments as illustrated in (20).

- (19) a. \*John wants to revolve the gyroscope, so revolve<sub>i</sub> he will t<sub>i</sub> it.  
b. \*John wants to get under the bed, so under<sub>i</sub> he will get t<sub>i</sub> the bed.  
(20) a. Should he revolve or tilt the gyroscope? B: revolve, of course.  
b. Is in or under the bed the best hiding place? B: Under, I reckon.

Although the evidence adduced so far seems to be strong, there are still some proposals sticking to the idea that there is a syntactic movement after all. Weir (2014) notices that there are indeed some cases where fragments are shown to not move, *pace* Merchant (2004b). To solve this contradiction, he argues that "fragments do move, but .. this movement takes place only at the level of Phonological Form. At Logical Form, the fragment remains in situ" Weir (2014: xi); but see Ott and Struckmeier (2018: p.440) for criticism. This line of thinking has been pursued further by Boone (2014: ch.4), where it is argued that there are cases requiring this 'exceptional movement'. Unfortunately, though, this exceptional movement is problematic for two conceptual reasons. For one thing, it poses a learnability hiccup as noted by Ott and Struckmeier (2016: p.225, originally attributed to Noam Chomsky via p.c.), that is, children would have to internalise two different movement operations, one for the elided contexts and one for the nonelided ones. Second, given that the A-bar movement has long traditions in the literature with concomitant diagnostics, proposing an analogous movement with distinct features is merely

an *ad hoc* patch up, to say the least, whose main aim is to resuscitate MADA.

### 6.4.3 Evidence for MADA

So far, I have examined potential problems for MADA. The question is: what is the evidence proposed in favor of it? As noted by [Griffiths \(2019: p.4\)](#), MADA, *qua* a configuration exhibiting the properties of A-bar movement, is "epitomized" by two big generalizations: Preposition-Stranding Generalization and Island Sensitivity Generalization.

#### 6.4.3.1 Preposition Stranding

As shown earlier, P-stranding is advanced by [Merchant \(2001, 2004a\)](#) to argue for the idea that remnants belong to clausal syntax which is silenced at the PF component of the grammar. Interestingly, this device is also employed to maintain the assumption that the remnants do undergo movement. The argument goes as follows: if a language, say English, allows P-stranding under sluicing as in (21), that means this language allows P-stranding under regular *wh*-movement. Crucially, this correlation conversely applies to languages which disallow P-stranding: German, for example, disallows prepositionless remnants under sluicing because it is a non-P-stranding language as shown in (22).

- (21) a. Peter was talking with someone, but I don't know (with) who.  
b. who was he talking with? [Merchant \(2001: p.92\)](#)

- (22) a. Anna hat mit jemandem gesprochen, aber ich weiß nicht  
Anna has with someone spoken but I know not  
\*(mit) wem  
(with) who  
b. \*Wem hat sie mit gesprochen?  
who has she with spoken?  
[Merchant \(2001: p.94\)](#)

As shown earlier, the P-stranding generalization has been observed for fragments as well. What is relevant to the ongoing discussion is that the data of the sort depicted in (21) and (22) are a consequence of MADA to sluicing, that is, in a P-stranding language as in English, it is thought that movement can be detected by assuming that the *wh*-phrase undergoes movement leaving the preposition stranded. By the same token, P-stranding is not available for non-P-stranding languages, hence the preposition must be pied-piped.

Although [Merchant \(2001\)](#) offers an extensive documentation from a cross-linguistic perspective to back up his P-stranding generalization,<sup>2</sup> this generalization has been contested cross-linguistically. First come Arabic varieties, which seem to be well-researched languages to this effect. To begin with, [Leung \(2014\)](#) investigates the behaviour of P-stranding in Emirati Arabic (EA), concluding that EA presents a crucial counterexample to P-stranding: while P-stranding is illicit under *wh*-movement (23a), sluicing is possible even if the elided structure contains a stranded preposition (23b).

- (23) a. \*ʔaj mʊkaan laag-et John fi?  
           which place met-2SM John in  
           ‘Which place did you meet John at’
- b. John fərab gahwa [wɪjja həd], bəs maa ʕərf [mənʊ ~~John~~]  
       John drank coffee with someone but not 1.know who John  
       ~~fərab gahwa [wɪjja]~~  
       drank coffee with  
       ‘John drank coffee with someone, but I don’t who’

The same holds true of Libyan Arabic (LiA), and Jordanian Arabic (JA). In particular, [Algryani \(2012: 64-65\)](#) cites two examples featuring LiA, displaying that the P-stranding under regular *wh*-movement is ungrammatical (24a), in contradistinction to sluicing as in (24b), where P-stranding is argued to be operative.

- (24) a. \*man təkəlleṃ Sami mɪ?  
           who talked.3MS Sami with  
           ‘Who did Sami talk with?’
- b. Sami təkəlleṃ mɪə wahəd, lakən mɪf ʔarəf (mɪa) man  
       Sami talked.3MS with someone but neg know.1ms (with) who  
       ‘Sami talked with someone, but I don’t know (with) who.’

By the same token, [Albukhari \(2016: p.88\)](#) cites analogous examples showing that P-stranding generalization does not hold in JA: while stranding a preposition is ungrammatical under *wh*-movement (25a), it is not under sluicing

---

<sup>2</sup>The P-stranding languages cited by [Merchant](#) (ibid. 92ff) are : English, Frisian, Swedish, Norwegian, Danish and Icelandic. On the other hand, the non-P-stranding languages include: Greek , German, Dutch, Russian, Yiddish, Polish, Czech, Bulgarian, French, Italian , Hebrew and Moroccan Arabic (ibid.94ff)

(25b).<sup>3</sup>

- (25) a. \*meen ḥaka ṣumar maṣ  
who talk.3ms Omar with  
'Who did Omar talk with?'  
b. ṣumar ḥaka maṣ ḥada bas ma b-a-ṣraf min  
Omar talk.3ms with someone, but not know.1s who  
~~ṣumar ḥaka maṣ~~  
~~Omar talk.3ms with~~  
'Omar talks with somebody, but I don't know who'.

As far as MSA is concerned, [Algryani \(2017\)](#) argues that MSA is a non-P-stranding language and hence P-stranding is blocked in fragments (26a) and full sentences (27), repeated from (21) and (22) in chapter 5.

- (26) maṣa man tahadaṯat Hind-un?  
with who talked.3SGF Hind-NOM  
'With whom did Hind talk?'  
a. \*Zayid-en  
Zayid-GEN  
'Zayid'  
b. maṣa Zayid-en  
with Zayid-GEN  
(27) \*Zayid-en tahadaṯat Hind-un maṣa  
Zayid-GEN talked.3SGF Hind-NOM with  
'Hind talked with Zayid'

In fact, I do not dispute that the prepositionless PP in MSA as depicted in (90a) is downright ungrammatical, but this ungrammaticality is not correlated with the assumption that MSA is a non-P-stranding language across the board (i.e. P-stranding is blocked only in non-elided sentences as in (91)), but to how the question should be formed in the first place. This is so important variable to control for, which goes unnoticed by [Algryani](#). In particular, the question-

---

<sup>3</sup>It should be noted, however, that [Algryani](#) and [Albukhari](#) argue that the apparent violations of P-stranding cited in the main text can receive an alternative analysis, where P-stranding in LA and JA derives from a clefted source (i.e. pseudosluicing), and not from a regular *wh*-movement, thereby salvaging the P-stranding generalization. A crucial tenet in the distinction between sluicing and pseudosluicing, however, is case-matching ([Van Craenenbroeck 2010](#)). Since case is not marked morphologically in Arabic varieties, the claim that violations of P-stranding be analyzed as an instance of pseudosluicing is questionable at best, because it is unclear what configuration we are talking about (i.e., sluicing vs. pseudosluicing). See [Almeida and Yoshida \(2007\)](#) for interesting discussion on Brazilian Portuguese, and [Fortin \(2007\)](#) on Indonesian.

answer congruence as in (28) is more felicitous in contrast contexts, where the fragment must be contrasted with an element in the question domain. Once the contrast reading is controlled for, the prepositionless PP is *possible* in MSA.

- (28) a. maʕ man tahadaθt Hind-un? maʕ Ali-en?  
 With how talked-3SG Hind-NOM? with Ali-GEN  
 ‘with whom did Hind talk’  
 b. [bʔl] (maʕ) Khalid-en  
 [evidently] (with) Khalid-GEN

As such, the data in (28) suggests that prepositions can be omitted in elliptical forms under certain discursive conditions in MSA, but this is not correlated with the possibility of P-stranding in nonelliptical forms, *contra* Merchant (2001).

Perhaps the strongest objection against the P-stranding generalization comes from English. In particular, Chung (2006) and Chung et al. (2011) report some examples featuring sprouting, a type of sluicing where the remnant has not overt correlate in the antecedent site, arguing that P-stranding is disallowed in elided forms (29), but allowed in non-elided ones (30). This observation goes by the name of “Chung’s Generalization”.

- (29) a. \*They’re jealous but it’s unclear who.  
 b. \*Last night he was very afraid, but he couldn’t tell us what.  
 (30) a. They’re jealous but it’s unclear who they’re jealous of.  
 b. Last night he was very afraid, but he couldn’t tell us what he was afraid of.

Departing away from syntax-centered explanations, these data suggest that there may be other factors underlying P-omission. For example, Philippova (2014: 133f) argues that P-omission is determined by the “prosodic weight” of the P: only those Ps which have an independent prosodic unit can be omitted freely. In same vain, Nykiel (2013) maintains that P-omission is not a syntactic phenomenon *per se*, but arises as a result of a performance-based constraint which is rooted in ‘memory retrieval’.<sup>4</sup>

<sup>4</sup>Specifically, Nykiel (ibid. p.77) maintains that preposition retention in sluicing is dependent on the informational make-up of correlates and remnants. By way of illustration consider the minimal pair in (a,b).

- a. A Fox 29 reporter was attacked by a senator, but I can’t remember (by) which (senator).  
 b. \*A Fox 29 reporter was attacked by somebody, but I can’t remember (by) which (senator).



### 6.4.3.2 Islands

A prominent manifestation of MADA is sensitivity to islands, i.e., if the fragment undergoes movement to the left periphery so as to escape the domain of ellipsis, it is predicted that island constraints will apply. This is, in essence, the proposal made in Merchant (2004a: 687f). By way of illustration, the fragment answer in (31), which belongs to an abstract syntactic structure as per the PF deletion approach to ellipsis, does undergo movement to the left periphery crossing an island node, thereby a grammaticality violation is expected.

- (31) Does Abby speak the same Balkan language that Ben speaks?  
- \*No, Charlie ~~she speaks the same Balkan language that t speaks~~.

Merchant (2004a: 688)

Before going into the dislocation data, which does not seem to be as straightforward as MADA predicts, two comments on island sensitivity are in order. First, some scholars argue that island constraints are syntactically overestimated, and hence the burden of explanation must be placed on discursive factors: alternative explanations for the data should be sought (i.e. information structure is argued to account for 'apparent' island violations), a position which I assume in a sense to be examined in due course.<sup>5</sup> For instance, Griffiths

According to Nykiel, the ungrammaticality of (b) is attributed to the assumption that correlate (i.e. somebody) is not salient enough, and hence the remnant, *qua* a more elaborate anaphor, is licensed by a correlate with a less anaphoric nature, rendering the sentence in (b) ungrammatical. See Almor (1999)'s Informational Load Hypothesis, cited in Nykiel (ibid.)

<sup>5</sup>Incidentally, the role of pragmatic/discursive (in)felicity has been argued to be a decisive factor in filtering out unattested strings. A case in point is the so-called 'argument-adjunct asymmetry' (Lebeaux 1988; Chomsky 1995). Specifically, it has been observed that R-expressions display an 'anti-reconstruction effect' if they coappear within an adjunct modifying a moved constituent as shown in (a).

- a. Which argument that John<sub>i</sub> made did he<sub>i</sub> believe? Fox (1999: 181) cited in Zeller (2004)  
b. \*Whose claim that John<sub>i</sub> is nice did he<sub>i</sub> believe? Lasnik (2003: p.131)

Inspired by Lebeaux (ibid.), Chomsky (ibid.) attributes the contrast between (a) and (b) to a derivational asymmetry underlying adjuncts and complements, that is, the sentence in (a) is fine because the relative clause, by virtue of being an adjunct, is not inserted until after *wh*-movement (i.e. 'late adjunction'). By contrast, the sentence in (b) is bad, the reason being that the complement clause has been merged along with the noun before the *wh*-phrase moves. Crucially, this suggests the R-expression in (b) is in the c-command domain of the pronoun 'he', yielding a Principle C violation. This is not the case, however, for (a), where it is argued that the R-expression is not within the scope of the pronoun, voiding a Principle C violation. What is relevant is that Lasnik (2003) convincingly argues that the noun-complement cases as in (b) are ruled out for reasons independent of reconstruction, that is, it is the *pragmatic* oddity which is the culprit. He writes:



and Lipták (2014) maintain that fragments are island-sensitive only if "there is an explicit relation of contrast between the elliptical remnant and its correlate in the antecedent clause" (ibid:199). The rationale is clear, that is, contrastive fragments do not ameliorate island effects (32), in contradistinction to non-contrastive ones as shown in (33).

- (32) a. I heard that they hired someone who speaks BULGARIAN fluently.  
b. \*No, SERBO-CROATIAN.
- (33) a. I heard that Irv and a certain someone from your syntax class were dancing together last night.  
B: Yeah, Bill.  
B': Really? Who?  
b. I hear that Abby is likely to get mad if Ben speaks to one of the guys from your syntax class.  
B: Yeah, John.  
B': Really? Who? Griffiths and Lipták (2014: 205-206)

The examples in (33a,b) point out that fragments can violate two strong islands: Coordinate Structure Constraint and Adjunct Constraint respectively. Notwithstanding, fragments are licensed, suggesting that syntactic movement is independent of island sensitivity. According to Griffiths and Lipták, what is at issue to explain the surprising behaviour of (33a) and (33b) is to assume that the fragments *Bill* and *John* are not contrastive elements. This is epitomized by the follow-up question in (B'), which highlights that these fragments are not contrasted with other material in the discourse, and hence voiding island violations. This generalization further is seconded by Ott and Struckmeier (2017), where it is argued that the infelicity of the fragment in (34a) is not due to the assumption that '*Abby*' crosses a strong island, but to pragmatic incongruence. That is, the fragment '*Abby*' is a infelicitous answer in this context; if this contextual variable is controlled for by "reformulating" the answer, the sentence

---

it is at least somewhat unusual for someone (John in this case) to rely on others' claims in order to determine his or her own personality characteristics (niceness in this instance). Further, it is not easy to imagine a situation where a set of claims that John is nice can be sufficiently individuated that some can be believed and others not.

As such, this suggests that purely syntactic/derivational explanations are indeed overestimated at the expense of discursive-related ones, which can account for the contrast in a straightforward manner. See also Frascarelli (2004: p.106, fn.10) for a view along these lines.

ceases to be infelicitous, as shown in (34c). See the cited works for further discussion and see also [Weir \(2014\)](#) and [Griffiths \(2019\)](#) for related, though not similar, proposals on the ability of discursive factors to account for island violations.

- (34) a. Does Ben speak the same Balkan language that CHARLIE speaks?  
A: \*No, ABBY.  
b. (No,) \*ABBY ~~speaks the same Balkan language that t speaks~~.  
c. Does Ben speak the same Balkan language that CHARLIE speaks?  
A: ABBY (you mean?)

Second, the relation between ellipsis and movement has spawned a wealth of clashing views. Sluicing is a recalcitrant phenomenon since this configuration does not seem to display sensitivity to islands, although it involves a regular *wh*-movement ([Ross 1969](#); [Merchant 2001](#); [Barros et al. 2014](#); [Abe 2015](#)). To show that this is the case, consider the examples in (99), taken from [Ross \(1969: 276-277\)](#), cited in [Abe \(2015: p.1\)](#).

- (35) a. \*She kissed a man who bit one of my friends, but Tom doesn't realize which one of my friends she kissed a man who bit.  
b. ?She kissed a man who bit one of my friends, but Tom doesn't realize which one of my friends ~~she kissed a man who bit~~.

In (35a), the *wh*-phrase undergoes movement crossing a relative clause island, yielding an ill-formed derivation. Surprisingly though, the ungrammatical status of (35a) can be rescued by applying ellipsis as in (35b).

Many theoretical attempts have been advanced over the years to account for this perplexing contrast, the most important of which is [Chomsky \(1971b\)](#)'s 'island repair by ellipsis'; see also [Merchant \(2001, 2004a\)](#) and [Lasnik \(2001\)](#) a.o. According this view, island constraints are evaluated at PF: by suppressing the island-involving string as in (35b), island effects cease to be operative. This connects to an arguable discrepancy between sluicing and fragments ([Merchant 2004a](#)): while sluicing can repair islands as in (35b), fragments cannot as shown in (34a). This proposal, however, has been challenged by cases where ellipsis in fragments is shown to repair islands in some contexts ([Hoji and](#)

Fukaya 2001; Stainton 2005; Valmala 2007; Griffiths and Lipták 2014).<sup>6</sup>

- (36) a. Does Abby speak the same Balkan language that someone in your syntax class speaks?  
 b. Yeah, Charlie, ~~Abby speaks the same Balkan language that t<sub>i</sub> speaks~~ (Griffiths and Lipták 2014: p.193)

As can be seen in (36), the fragment *Charlie* undergoes movement from within a strong island (i.e. complex NP island) without inducing a grammaticality violation, suggesting that 'repair by ellipsis' is not a strategy made available only to sluicing.

An alternative approach to go about this controversy is to propose an in-situ analysis for clausal ellipsis. This means that insensitivity to islands is amenable to an analysis which maintains the assumption that the remnant does not undergo movement but it stays in situ. Interestingly, there are a lot of proposals pursuing this idea in the literature; these include: Kimura (2010), Ott and Struckmeier (2016, 2018), and Abe (2015) a.o. I argue that this approach does fare well for Arabic dislocation in a sense to be examined in section 6.4.4.2.

All in all, that island (in)sensitivity presupposes a given derivational history should not be taken at face value.<sup>7</sup> For one thing, an interplay of some factors having to do with discursive considerations may conspire to account

<sup>6</sup>In a self-explanatory article entitled "*There is No Island Repair*", Barros et al. (2014) argue that the apparent repair attested for sluicing is due to the assumption that the ellipsis site contains a "short sluice": an ellipsis site which does not contain island (i.e. evasion strategy). Thus, in cases involving repair by ellipsis as in (101b), the ellipsis site does not reduplicate the whole antecedent, but only 'a short source' which does not contain an island. See the cited work for further discussion

<sup>7</sup>According to Boeckx (2003: 65), reinterpreting Ross (1967), "(c)crossing an island in and of itself [does] not suffice to yield a deviant output". Accordingly, he develops a theory of A-bar movement which derives islandhood from agreement relations. A thorough discussion of his proposal is not intended here but I will sketch how the relation between islands and locality conditions is reinterpreted. In particular, he maintains that islands in the sense of Ross bans agreement relations NOT movement. To defend this approach to islandhood, he exploits Chomsky (2000)'s Probe-Goal theory which is rooted in two central notions; Match and Agree. While Match refers to a configuration where a probe finds similar features in a goal, Agree mandates that there be a transfer of features from the goal to the probe. To see how this theory works with respect to islandhood and resumption, consider the examples shown in (a) from Hebrew, a language where resumption is argued to be insensitive to all kinds of islands, and from Greek as in (b), a language where resumption is thought to be sensitive to strong islands.

- a. Raʔiti ʔet ha-yeled ʔašer/še-ha-cayed harag ʔet ha-arie ʔašer/še-radaf ʔaʔarav.  
 saw.1ST ACC the child COMP-the-hunter killed ACC the lion COMP-chased after him  
 'I saw the child that the hunter killed the lion that chased (him).' Boeckx (2003: 20)  
 b. \*Pira mia efimerida pu o Petros apokimithike eno tin diavaze  
 got.I a paper.ACC COMP the Petros fell-asleep while it read.he  
 'I got a paper that Petros fell asleep while reading (it). Boeckx (2003: 111)

for island violations or absence thereof, in a way which is just as parsimonious as alternative derivational accounts, with the added value that these non-derivational ways of construing syntactic strings do circumvent the so-called ‘exceptional movement’ alluded to earlier, and at the same time relieve the grammar of the non-ending debate on ‘repair by ellipsis’; a specific-construction mechanism which does exist only in ellipsis, rendering its testability in a wider domain empirically difficult (Griffiths 2019: p.25). Indeed, these are crucial points to raise for the purposes of the next subsection, where I pursue an analysis which voids any derivational import when it comes to the question of locality.

#### 6.4.4 The interplay between islands and dislocation

It is time now to turn to the backbone of this section, *viz.*, locality and dislocation. Before going into this issue, let me recapitulate how locality conditions are conceived under a bisentential approach. According to this approach, CLLD I and CLRD I comprises two clauses: the elided one contains the dXP, and the nonelided one hosts the clitic. In order to test island (in)sensitivity, the clitic must be put in the island domain within the non-elliptical clause. Crucially, the dXP will be merged in the same island within the elided clause. Hence, the biclausal analysis makes the following predictions: (i) a grammaticality violation would ensue if the dXP undergoes movement to the left periphery, and (ii) no grammaticality violation would arise if the dXP remains in situ. Most important, if dXP is proved to undergo movement, this strongly constitutes an argument for MADA (Fernández-Sánchez 2017, 2020).

---

According to Boeckx, Match operation knows no limit in that the probe in (a) can enter an island and match its feature against the goal (i.e. him). On other hand, the ungrammaticality of (b) springs from the hypothesis that Agree relation between the probe and goal cannot be established since Agree cannot cross an adjunct island. It follows then that resumptive chains formed by Match are insensitive to islands, whereas resumptive chains formed by Agree are sensitive to islands as in Greek. The upshot of this proposal then is that resumption would involve movement under Match rather than Agree, and hence islands effects are relegated to be constraints on agreement relations rather than movement *per se*. I am not in a position here to argue for or against this theory—see Alexopoulou (2006: p.105f) & López (2009: p.232f) for criticism—but want to make the plausible claim that the presence of islands or the absence thereof does not give rise exclusively to a movement- construal analysis as typically entertained in the dislocation literature.

#### 6.4.4.1 Ott and De Vries (2016), De Vries (2013)

Let us start with an empirical wrinkle originally noted by De Vries (2013: 165f) & Ott and De Vries (2016: 669f). In particular, De Vries (2013: 165f) reports examples featuring right dislocation (RD) in Dutch, arguing that RD is island-sensitive in this language, as the following data shows.<sup>8</sup>

- (37)
- a. \*[Dat Piet haar geplaagd had], vond ik niet erg, die vrouw.  
that Piet her teased had found I not awful that woman  
'[\*]That Piet had teased her I did not think regrettable, that woman.'
  - b. \*Ik heb iemand [die haar geplaagd had] een reprimande  
I have someone who her teased had a rebuke  
gegeven, die vrouw.  
given that woman  
'[\*]I gave someone who teased her a rating, that woman.'
  - c. \*[Toen ze aan kwam fietsen], sprong Piet op, die vrouw.  
when she on came cycling jumped Piet up that woman '  
[\*]When she arrived cycling, Piet jumped up, that woman.

According to De Vries, the ungrammaticality of (37) is attributed to the assumption that the dXP is extracted out of a fronted clausal object (37a), a relative clause (37b) and an adjunct (101c). This can be verified in (38), adapted from De Vries (2013).

- (38)
- a. \*[die vrouw]<sub>i</sub> [Dat Piet ~~t<sub>i</sub>~~ haar geplaagd had] vond ik niet erg.
  - b. \*[Die vrouw]<sub>i</sub> ik heb iemand [die ~~t<sub>i</sub>~~ geplaagd had] een reprimande  
gegeven.
  - c. \*[Die vrouw]<sub>i</sub> [~~toen t<sub>i</sub>~~ aan kwam fietsen] sprong Piet op.

This is not the whole story, though. De Vries reports variants of (37), which seem to be island-insensitive. This is illustrated in (39).

- (39)
- a. Piet vertelde dat hij haar geplaagd had, die vrouw.  
Piet told that he her teased had that woman  
'Piet said that he had teased her, that woman.'
  - b. Ik sprak met iemand die haar geplaagd had, die vrouw.  
I spoke with someone who her teased had that woman

<sup>8</sup>Peter Ackema (p.c.) notes that the example in (37a) is not the most straightforward one to show island effects. The problem here is that the pronoun is contained in a complement clause that is not an island as such, but is apparently turned into one by being fronted. If this clause stays in complement position, the structure is fine as in (a). Moreover, he judges the sentence in (37a) as not that bad.

- a. Ik vond niet erg dat Piet haar geplaagd had, die vrouw.

- 'I talked to someone who had teased her, that woman.'
- c. Piet sprong op toen ze aan kwam fietsen, die vrouw.  
 Piet jumped up when she on came cycling that woman  
 'Piet jumped up when she arrived cycling, that woman.'

Here is a paradox: right dislocation in Dutch is not *always* island-sensitive. To unpack this paradox, De Vries (ibid., 167) argues that "the usual constraints on A-bar movement are operative in dislocation constructions, but sometimes these can be *avoided by means of an alternative way of constructing the sentence*" (italics mine). The question is: how is this 'alternative way of constructing the sentence' implemented? According to De Vries (ibid.) as well as Ott and De Vries (ibid.), the sentences depicted in (103) do not cross an island. This is due to the assumption that since right dislocation involves coordination, there is no reason for right dislocation to be limited to main clauses, and this presents evidence for coordinating embedded CPs instead of main clauses. As such, the dXP in (39c) for example does undergo movement, but this operation is implemented locally (i.e. local A-bar movement) as illustrated in (40), where coordination applies at the level of the clause island.

- (40) Piet sprong op [toen ze aan kwam fietsen]: [die vrouw kwam  $t_i$  aanfietsen]

A crucial consequence of this analysis, explicitly argued for by De Vries (ibid.), is that the structural position of the embedded island clause matters: it must be clause-final. As the sentences in (37) show, the embedded island clause is non-final, giving rise to ill-formed strings (i.e. specifying coordination involving a clause that is not sentence-final is not allowed).

Despite this interesting analysis being able to capture why island effects are neutralized in some contexts, I have to take issue with it for three reasons. First, it is unclear why the dXP undergoes movement since there is no trigger for it. The plausible – or 'typical' I should say – justification for this movement is to circumvent the so-called 'non-constituent ellipsis'. This is rather a weak trigger, however, since this notion is questionable in the first place as I showed earlier (see footnote 3 above).<sup>9</sup> Second, this analysis poses a learnability prob-

<sup>9</sup>This issue has been explicitly examined, albeit in a footnote, in Ott and De Vries (2012: 132 fn.10) as a response to a reviewer. In particular, they maintain that this "movement is generally triggered by a [+Focus]-feature on the fronted XP". Unfortunately, this is an unsatisfying explanation given the problems highlighted in the main text, which this 'exceptional movement' has to face. It should be noted, however, that Dennis Ott seems to retract this position recently (Ott and Struckmeier 2016, 2018), but this retraction, to the best of my knowledge, is limited to clausal ellipsis, and not yet carried over to the dislocation data.

lem, as children have to learn that relating a dXP to an embedded resumptive pronoun is contingent on the clause type: if island violations are to be avoided, an embedded clause, to the exclusion of a main clause, must be sentence final; an implausible conclusion, I believe. The last but not the least problem<sup>10</sup> is that there is a cross-linguistic argument which speaks against this analysis, that is, RD is a root phenomenon in some languages such as Turkish (Kural 1997) and Japanese (Tanaka 2001). Incidentally, Ott and De Vries (2016: p.670, fn.43) are aware of this problem, but they leave it to future research. This is a crucial point to address, however, if the analysis is meant to achieve a cross-linguistic generality.

#### 6.4.4.2 Arabic dislocation and locality: the proposal

Resuming the discussion adumbrated in chapter 2, I now turn to the interplay between locality conditions and Arabic CLLD I and CLRD I. In what follows, I reproduce the same data in section 2.5.5, and see how they can be best approached. To start with, CLRD I in MSA is island-sensitive as the examples below show: while the clitic is embedded in a fronted clause in (41), the 'pro' is inside a temporal adjunct in (42). For convenience, the island domain is put in brackets.

- (41) \*[ʔaan alyian taharafa bi-ha], aʒidu-hu amran  
 that Ali-ACC harass-3SG with-her, pro find it something  
 mustahʒanan, ʔʔni auXtuka  
 disgusting, (I mean) your sister.  
 'It is disgusting that Ali harass your sister'

<sup>10</sup>There is further an understudied phenomenon, which is not controlled for by De Vries (2009b) & Ott and De Vries (2016). In particular, Barros et al. (2014: sec.3.4) observe that island sensitivity can be ameliorated if the contrastive fragment is *utterance-final*, as illustrated in (b). This phenomenon goes by the name of "utterance-final effect". See also Griffiths (2019: 6,fn.2), Griffiths and Lipták (2014: 202, fn.10) and Reeve (2016: sec.3.2) for a possible explanation.

- a. Did Ben leave the party because ABBY wouldn't dance with him?  
 - \*No, BETH  
 b. Did Ben leave because you offended ABBY?  
 - ? No, BETH.

Incidentally, De Vries (2013: p.166) is aware of this issue, noting that "it is syntactic hierarchy and not linear distance between the correlate and the dXP that is essential..". It remains to be seen, however, why insensitivity of islands in Dutch RD is correlated with the fact that the correlate is contained in an embedded clause, which is *necessarily* sentence-final.



- (42) \*[ʕindama qadimat rakaðat-an] qafaza zayidun min  
 when pro came walking, jumped Zayid-NOM from his  
 syrratiyhi, tilka almar?  
 car-GEN, that woman  
 '\*When she came walking, Zayid jumped out of his car, that woman'

The ungrammaticality of these sentences is typically accounted for by the bi-clausal 'practitioners' by assuming that the dXP undergoes A-bar movement to the left edge of the elided clause, crossing an island node, thereby inducing a grammaticality violation, as illustrated in (43).

- (43) a. \*uXtuka<sub>i</sub> [ʔaan alyian taharafa bi t<sub>i</sub>]  
 b. \*tilka almarʔah<sub>i</sub> [ʕindamʔ qadimatət t<sub>i</sub> rakathat-an]

Now consider the following grammatical data, the dXP being extracted out of a relative clause and an adjunct in (44) and (45) respectively: these examples show that CLRD I in MSA is not sensitive to islands if the island is clause-final, in parallel to Dutch.

- (44) a. tahadaθtu maa al-razuli allōi taharafa bi ha,  
 talked-3SG with the man-gen who harass-3SG with her,  
 tilka ʔlimrʔah  
 that woman  
 'I talked with the man who harassed that woman'  
 b. [... tilka ʔlimrʔah]<sub>i</sub> .. [tahadaθtu maa al-razuli allōi taharafa bi t<sub>i</sub>]
- (45) a. Zayidun qafaza min syarratihi ʕindama wasalat  
 Zayid-NOM jumped-3SG from car-his when pro arrived  
 rakithatan, ʔʕni tilk alimrʔah  
 walking, (I mean) that woman.  
 'Zayid jumped out of his car when he saw the woman'  
 b. [... tilka alimrʔah]<sub>i</sub> ... [Zayidun qafaza min syarratihi ʕindama wasalatt t<sub>i</sub> rakiðatan ]

As far as CLLD I in MSA is concerned, the relation between the dXP and the pronominal clitic may be separated by (strong) islands. This is shown for Complex NP Constraint (46) and Subject Condition (47).

- (46) a. [zayid-an], hyiaat [al-mudaress-a allaði darasa-hu]  
 Zayid-Acc pro greet-1SG the-teacher-ACC who teach-him.ACC  
 'I greeted the teacher who teaches Zayid'  
 b. [zayidan]<sub>i</sub> hyiaat al-mudaressa allthi darasa t<sub>i</sub> ]
- (47) a. kutubu Chomsky, [qiraʔtu-ha] yayatun fi aʔtʕgidi

- books Chomsky, reading them very difficult  
 'Chomsky's books are hard to read'
- b. [kutubu Chomsky]<sub>i</sub> [qiraʔtu t<sub>i</sub> ʔayyatun fi aʔtʔgidi]

As can be seen, there is a discrepancy in the behavior of dXPs in Arabic CLRD I: the extraction of the dXP is blocked in (41) and (42), but is grammatical in (44, 45). As far as Arabic CLLD I is concerned, the dXP can be extracted out of an island freely. The question is how can we account then for the fact that the strong islands are uniformly transparent for CLLD I, but selectively opaque for CLRD I in MSA? One way to explain this is to assume, according to many bi-clausal analyses of dislocation, that sensitivity to islands entails an 'exceptional' movement operation. This is not an elegant explanation, though, due to some inherent glitches rooted in this type of movement.

What I would like to suggest instead is a uniform analysis which is rooted in the claim that the dXP does not undergo movement in Arabic CLLD I and CLRD I, but it stays in situ. The question is then: why is the dXP in Arabic CLRD I selectively opaque for islands? The long and the short of my answer, following *in spirit* Reich (2007), Weir (2014), Barros (2014) and Ott (2016a), is that *dislocation in MSA must be structured as a congruent answer to the implicit or explicit QUD*: a question that given interlocutors try to resolve (Roberts 2012). Recall that I argue in Chapter 3 that what underlies Arabic dislocation is that this phenomenon is a strategy to answer a QUD. Consider (48), a case of CLRD I. From an information-structural perspective, the right-dXP in MSA is employed as a clarification answer to an implicit question about the resumptive clitic contained in the host clause. The problem with (48), a reformulation of (41), is not that the dXP has crossed an island, but the fact that the question as illustrated below (48b) is not salient enough to be accommodated.

- (48) a. \*[aan alyian taharaʃa bi-ha] aʒidu-hu amran mustahʒanan.  
           that Ali harassed her, I find it something disgusting
- b. #Whom did Ali harass?  
       - ~~aʒidu-hu amran mustahʒanan~~ [aan alyian taharasha bi uʔtuka]

Building on Ott (2017: 11-12) and Onea (2016), I assume that the implicit questions must be salient to be accommodated by the hearer. This presupposes that there is a correlation between the (in)felicity of the implicit questions and the content of the host clause. Against this background, the infelicity of (41) is not due to the assumption that the dXP has crossed an island, but to the fact that the question is not salient enough for the hearer, and this affects the interpre-

tation of the host clause in toto, rendering it infelicitous as well. This is an obvious observation indeed, since no answer is felicitous if the question is not construed correctly in the pragmatic sense. To salvage the sentence in (41) the dXP must be licensed as a response to a salient question about the cataphoric clitic. This can be achieved by putting the dXP at the level of the island domain. Once this linear positioning of the dXP relative to the island domain is realized, no island effects arise. This essentially corroborates [Stainton \(2005\)](#)'s conclusion that what matters for a pragmatic-based analysis like this is "the appearance" of the proposition.

- (49) a. aʔɜidu-hu ʔmran mustahʒanan [aan alyian taharaʃa bi-ha].  
I find it something disgusting that Ali harassed her.  
b. Whom did Ali harass?  
~~ajidu hu amran mustahjanan [aan alyian taharasha bi ukhtuka]~~

As can be seen, the dXP both in (48) and (49) do not undergo movement crossing an island domain, suggesting that island constraints are not at play. What is at issue instead is that the dXP in (49), *qua* an answer to a salient implicit question, is a coherent continuation of the host clause, in contrast to (48), where uttering the dXP ends up in a pragmatic impasse, since it does not constitute a possible and coherent continuation of the host clause. This is exemplified in (50), where the implicit question cannot be reconstructed from the host clause, contrary to (51). Put otherwise, the host clause must end with a verb (i.e. *harass*) which selects for an object (i.e. dXP); this is the case for (50) contrary to (51).

- (50) a. that Ali harassed her, I find it something disgusting.  
b. #Whom did Ali harass?  
c. your sister reconstruction for (48)  
(51) a. I find it something disgusting that Ali harassed her.  
b. Whom did Ali harass?  
c. your sister. reconstruction for (49)

CLLD I cases of the sort depicted in (46-47) can be considered in the same way. In particular, given the claim, examined in some detail in [chapter 2](#), that CLLD I-ed elements in MSA are contrastive topics, the dXP in (52) is taken as answer to a subquestion.

- (52) a. Who meet who?<sup>11</sup>  
 b. Zayidan<sub>i</sub> hyiaatu al-mudaress-a allađi darasa t<sub>i</sub>  
     Zayid greet-1SG the-teacher-ACC who-teach  
 c. What about Zayid? = subquestion of (116b)  
     - hyiaat [al-mudaress-a allađi darasa-hu]

In (52), the dXP is extracted out of a Complex NP island (i.e. a strong island), and hence it should induce a grammaticality violation in consonance with the mainstream biclausal analyses. This is not the case, however. The explanation for this goes as follows: the speaker in (52) responds to the main QUD with the base-generated fragment *Zayidan* as in (53).

- (53) hyiaatu [al-mudaress-a allađi darasa Zayidan]

Uttering this bare fragment poses a conversational insecurity on the part of the hearer, giving rise to a subquestion which is resolved by pronouncing the host clause in (52c). More important, the answer to the subquestion is congruent satisfying discursive coherence.

It should be noted that my treatment of islands effects, *qua* pragmatic violations, is not novel, since there are already proposals arguing for a non-syntactic source of islands effects.<sup>12</sup> This is typically due to the fact that islands constraints exhibit ‘a graded nature’, in that it is not agreed as yet that islands, even strong ones, lead automatically to ungrammaticality (Hofmeister and Sag 2010). An adjunct island is a case in point, where it has been assumed for a long time that this island is opaque to extraction ( i.e. strong island). But this proves to be not the case under certain conditions. Truswell (2011: 38) for example argues that the extraction out of adjuncts is not uniform, as the contrast in (54) illustrates.

- (54) a. What did John drive Mary crazy [whistling —]?  
 b. What did John die [whistling —]?.  
 c. \*what does John work [whistling —]?

Specifically, Truswell argues that the way ‘events’ are construed can be taken as a condition to filter out island constraints. Under this analysis, an adjunct

<sup>11</sup>This is the main QUD, or the Big Question in Roberts’s (2012) parlance

<sup>12</sup>Interestingly, this has been foreshadowed by Ross (1967: 291) in his seminal dissertation, which ushered in the birth of ‘islands’ in the generative theory. He wonders “(w)hy should complex NP’s, coordinate nodes, sentential subject clauses, and NP’s on the left branches of larger NP’s all function the same in defining islands? Can islands be shown to behave like *psycholinguistic* entities?” (italics mine). Nevertheless, he stops short of fleshing out an analysis along these lines.

extraction is subject to Single Event Condition (SEC), which requires that the minimal constituent containing the whole chain describes a single event. In (54a) and (54b) extraction out of adjuncts is possible because the matrix VP *drive crazy* and *die* constitute a single event along with the adjunct VP *whistling*. By contrast, extraction out of the adjunct in (54c) is illicit since the single event reading does not obtain. In Truswell's words, this is attributed to the assumption that "we cannot .... construe the whistling event and the working event ... as jointly forming a single event".

Note that Truswell (2011)'s semantic characterization of locality constraints is not the only attempt to derive locality constraints from non-syntactic factors; see Boeckx (2012) for an excellent overview. Givón (1979: 17) for example maintains that the island violation depicted in (55) can be derived from factors related to "perceptual strategies of speech analysis".

(55) \*The man that I saw [the dog that bit —]

To account for the ungrammaticality of (55), he maintains that this sentence is

difficult to process because the grammatical-functional relations of subject and object in the deeply embedded clause are hard to reconstruct, given the deletion, the lack of morphological indication, and the fact that there was a large gap between the head noun the man (object of bit) and the verb of which it is the object.

More radically, some authors take a "reductionist" stand, which aspires to dispense with island constraints altogether (Boeckx 2012). Hofmeister and Sag (2010) for example claim that islands violations are attributed to "inherent features that make them difficult to process". Complex NP Constraint cases of the type shown in (56) is a case in point.

(56) \*Which politician did you<sub>1</sub> read reports<sub>2</sub> that we<sub>3</sub> had imposed?

According to Hofmeister and Sag, the example in (56) is "informationally heavy" and "referentially rich" in that it requires processing three nominals (*you*, *reports* and *we*) inside the *wh*-dependency, and crossing the relative clause. Under a processing account, the example depicted in (56) featuring Complex NP Constraint "can be made quite acceptable by using semantically rich fillers, ... and intervening NPs of high accessibility ...".

Thus, the upshot of these non-syntactic characterizations of strong islands is the fact that islands, even the strong ones, may not in and of themselves

opaque for extraction since there are non-structural factors underlying the island-related degradedness.

Wrapping up, this state of affairs points to the fact that the locality constraints should not be interpreted in structural terms, but there are many domains which happen to converge resulting in (il)licit configurations. As far as Arabic dislocation is concerned, the foregoing discussion suggests the following conclusion: no matter how strong the islands are, they can be neutralized under an pragmatic way of construing the proposition.

#### 6.4.5 Ellipsis is a phonological phenomenon

Before concluding this chapter, a very short note on the nature of ellipsis is in order. Given my assumption that purely syntactic analyses of ellipsis are not on the right track, the question which arises is: in which component of the grammar is ellipsis formed? To answer this question, I align myself with an old view which takes ellipsis as “determined within the PF-component” (Chomsky and Lasnik 1993: 546); see also Tancredi (1992). This view has been maintained by Abe (2015, 2016), Fox (1999), Ott and Struckmeier (2016, 2018) and Fernández-Sánchez (2017, 2020) among others. The original observation of this view is that ellipsis is a type of ‘radical deaccentuation’. In fact, this line of reasoning has non-trivial merits with respect to the in-situ analysis defended in this thesis. First, the problematic issue of so called ‘non-constituent ellipsis’ will not arise, since ellipsis is relegated to phonology, which is thought to be orthogonal to syntactic constituency. Second, due to the assumption that ellipsis is a form of deaccentuation, exceptional movement of remnants is rendered obsolete. For instance, the fragment in (57b), repeated from (17) is grammatical because no movement is involved in the derivation, since this operation is not obligatory if the phonological view of ellipsis is maintained. For ease of exposition, ‘deaccentuation’ is marked by SMALL CAPS in (58).

(57) a. hal kaant tʔlbasu fustan-an abyadd-an  
Q [was] wear cloth.ACC white.ACC?  
'was she wearing white clothes?

b. laa, [bal] asswad-an  
No, [evidently] black.ACC

(58) [KAANT TʔLBASU FUSTANAN] asswad-an

## 6.5 Conclusion

As far as information structure is concerned, the current analysis neatly captures the apparent information-structural paradox attested for the dXPs in CLLD I and CLRD I. In particular, given the fact that the remnants are typically interpreted as focal, this state of affairs seems to be at odds with the informational import of the dXPs partaking in the phenomenology of dislocation, which denote given information under the standard assumptions. As I argued earlier, this tension is apparent actually, since the dXP typically provides specifying/new information relative to the internal-clause clitic, giving rise to the semantic asymmetry required for the specifying coordination. In a sense, locally focused constituents such as the dXPs can be backgrounded in the discourse. I moreover take up the prosody of CLLD I and CLRD I in MSA, noting that the current analysis, delicate though, makes the right prediction on the prosodic independence of the dXP: it belongs to a root clause, which is subsequently mapped into a separate prosodic unit in the phonological component of the grammar.

Finally, a problematic aspect of many bi-clausal analyses of dislocation, I think, is that it still defends the idea that the dXP undergoes movement after all before the deletion process is applied to the TP. This is not a real theoretical gain, indeed. Alternatively, I strongly believe that the real theoretical gain can be only achieved by finding a way out to relieve CLLD I I and CLRD I in MSA of any movement operations. This was the core focus of section 6.4, where I argue that the island constraints can be accounted for by invoking pragmatics, rather than syntax.



# Chapter 7

## Conclusion

This thesis is meant to be a contribution to the syntax of clitic resumption in MSA. As I showed in chapter 2, MSA has both CLLD and HTLD, *contra* the previous literature. For expository and terminological reasons which were examined in section 2.5, I abstracted from the mainstream labelling and use a more transparent labelling to classify clitic resumption constructions in the Arabic left-periphery: CLLD I and CLLD II. Likewise, I argued that the same constructions which appear in the left periphery have a presence in the right periphery, dubbed CLRD I and CLRD II. I further showed that this new taxonomy captures a basic regularity underlying clitic-resumed elements in MSA, and at the same time can be derived from a single property, which is rooted in case (mis)matching, *contra* previous studies in the dislocation literature which assume a stack of properties to decide between CLLD (CLLD I) and HTLD (CLLD II) for example.

Another question which this thesis tries to answer concerns the interpretation of the dXPs in MSA. As examined in chapter 3, I showed that the determining factor underlying the interpretation of clitic resumption is contrastiveness. This position turns out to have a non-trivial impact on the interpretation of atypical topics, which as shown in section 3.4.2 can be left-dislocated if they are drawn from a contrast set. Further, I argued that it is the information-structural import of atypical topics (i.e. contrastiveness) which licenses their appearance in the left periphery, and not the presence of a resumptive pronoun, *contra* the previous literature, which was examined in some detail in section 3.4.1.

I turn in chapters 4 and 5 to the syntax of CLLD I and CLRD I. After reviewing the dominant monoclausal approach to CLLD I and CLRD I, which was examined in great detail in chapter 4, I argue against this view for it is empirically and conceptually untenable. As an alternative solution, I advanced the

proposal that CLLD I and CLRD I are best derived from three well-motivated operations in natural languages: cataphora/anaphora, ellipsis and coordination. To the extent that the proposed analysis is on the right track, the theory of grammar is relieved from unmotivated constructions such as CLLD I and CLRD I by deriving them from independently motivated operations. In other words, there is no such a thing as CLLD I or CLRD I.

There are still remaining questions when it comes to the crosslinguistic validity of the bisentential analysis. In particular, how can this analysis account for classless languages? As I argue at length in 5, case connectivity has been given a high prominence, but this does not entail that caseless languages cannot be investigated along with the the biclausal analysis. One way to investigate this matter is by recourse to other connectivity effects such as Condition A, Condition C and the ability of dXPs to reconstruct for the purpose of a bound reading of pronouns embedded within a dislocated constituent. Alas, pursuing this line of investigation is beyond the scope of this thesis, and hence I have to leave it to future research

As far as future research is concerned, to the extent that the bi-clausal analysis is on the right track, this analysis equates CLLD I and CLRD I in MSA with a set of phenomena which are structurally very similar, like appositives, afterthoughts and split questions. These phenomena are argued by many scholars to display a biclausal structure ([Arregi 2010](#); [Ott and De Vries 2016](#); [Ott and Onea 2015](#); [Ott 2016b](#)). To the best of my knowledge, I am not aware of a single work analyzing appositives and split questions in the generative literature on MSA from a bisentential perspective. This direction of future research hence will be a contribution towards exploring these hitherto underrepresented phenomena. Crucially, if the bisentential approach to these apparently disparate phenomena on is on the right track, this should be taken as a theoretical gain, indeed, since it captures previously unrelated phenomena (i.e. equating appositives, split questions and afterthoughts with CLLD I and CLRD I) by arguing that they all involve an unitary and well-motivated principle, which is rooted in the operation DELETE.

# Bibliography

- Abbott, B. (2004). Definiteness and indefiniteness. In *The handbook of pragmatics*, pages 122–152. R. Horn, L. and Ward, G. (eds).
- Abd al Ra’uf, H. (1998). *Subject, theme and agent in Modern Standard Arabic*. Psychology Press.
- Abe, J. (2004). On directionality of movement: A case of Japanese right dislocation. In *Proceedings of the 58th Conference: The Tohoku English Literary Society*, pages 54–61. Citeseer.
- Abe, J. (2015). *The in-situ approach to sluicing*, volume 222. John Benjamins Publishing Company.
- Abe, J. (2016). Make short answers shorter: Support for the in situ approach. *Syntax*, 19(3):223–255.
- Abels, K. (2012). The Italian left periphery: A view from locality. *Linguistic Inquiry*, 43(1):229–254.
- Abels, K. (2019). On “sluicing” with apparent massive pied-piping. *Natural Language & Linguistic Theory*, 37(4):1205–1271.
- Abels, K. and Neeleman, A. (2009). universal 20 without the LCA. In *Merging features: computation, interpretation, and acquisition.*, pages 60–80. Oxford University Press. Brucart, M. Gavarró, A. and Solá, J. (eds.).
- Aboh, E. O. (2010). Information structuring begins with the numeration. *Iberia: An International Journal of Theoretical Linguistics*, 2 (1), 12-42.
- Ackema, P. and Neeleman, A. (2004). *Beyond morphology: Interface conditions on word formation*, volume 6. Oxford University Press.
- Ackema, P. and Szendrői, K. (2002). Determiner sharing as an instance of dependent ellipsis. *The Journal of Comparative Germanic Linguistics*, 5(1-3):3–34.

- Adger, D., De Cat, C., and Tsoulas, G. (2004). *Peripheries: syntactic edges and their effects*, volume 59. Springer Science & Business Media.
- Adger, D. and Ramchand, G. (2005). Merge and move: Wh-dependencies revisited. *Linguistic inquiry*, 36(2):161–193.
- Aelbrecht, L. (2010). *The syntactic licensing of ellipsis*. John Benjamins Publishing Company.
- Al-Balushi, R. A. (2011). *Case in standard Arabic: The untraveled paths*. PhD thesis, University of Ottawa.
- Albukhari, J. (2016). *The syntax of elliptical constructions in Jordanian Arabic*. PhD thesis, University of Wisconsin-Milwaukee.
- Alexiadou, A. (2006). Left dislocation (including CLLD). In *Everaert & van Riemsdijk (eds.)*, 668-699.
- Alexopoulou, T. (1999). *Syntax of discourse functions in Greek: a non-configurational approach*. PhD thesis, The University of Edinburgh.
- Alexopoulou, T. (2006). Resumption in relative clauses. *Natural language & linguistic theory*, 24(1):57–111.
- Alexopoulou, T. (2008). Binding illusions and resumption in Greek. *MIT Working Papers in Linguistics*, 57:34–48.
- Alexopoulou, T., Doron, E., and Heycock, C. (2004). Broad subjects and clitic left dislocation. In *Peripheries*, pages 329–358. Springer.
- Alexopoulou, T. and Keller, F. (2007). Locality, cyclicity, and resumption: At the interface between the grammar and the human sentence processor. *Language*, pages 110–160.
- Alexopoulou, T. and Kolliakou, D. (2002). On linkhood, topicalization and clitic left dislocation. *Journal of Linguistics*, 38(2):193–245.
- Algryani, A. (2017). Ellipsis in Arabic fragment answers. *Order and structure in syntax II*, page 319.
- Algryani, A. M. K. (2012). *The syntax of ellipsis in Libyan Arabic: a generative analysis of sluicing, VP ellipsis, stripping and negative contrast*. PhD thesis, Newcastle University.

- Almeida, D. A. d. A. and Yoshida, M. (2007). A problem for the preposition stranding generalization. *Linguistic Inquiry*, 38(2):349–362.
- Almor, A. (1999). Noun-phrase anaphora and focus: The informational load hypothesis. *Psychological review*, 106(4):748.
- Amer, A. (2015). On agreement affixes, incorporated pronouns, and clitics in standard arabic. *SKY Journal of Linguistics*, 28.
- Anagnostopoulou, E. (1994). *Clitic dependencies in modern Greek*. Doctoral Dissertation, University of Salzburg.
- Anagnostopoulou, E. (1997). Clitic left dislocation and contrastive left dislocation. *Materials on left dislocation*, pages 151–192.
- Anagnostopoulou, E. (1999a). Conditions on clitic doubling in Greek. *Empirical Approaches to Language Typology*, pages 761–798.
- Anagnostopoulou, E. (1999b). On experiencers. In *Studies in Greek syntax*, pages 67–93. Springer.
- Anagnostopoulou, E. (2003). *The syntax of ditransitives: Evidence from clitics*, volume 54. Walter de Gruyter.
- Anagnostopoulou, E. (2006). Clitic doubling. *The Wiley Blackwell Companion to Syntax, Second Edition*, pages 1–56.
- Anagnostopoulou, E., Van Riemsdijk, H., and Zwarts, F. (1997). *Materials on left dislocation*, volume 14. John Benjamins Publishing.
- Androulakis, A. (2001). Clitics and doubling in Greek. *Reading Working Papers in Linguistics*, 5:85–111.
- Aoun, J. (1981). *The Formal Nature of Anaphoric Relations*. PhD thesis, MIT.
- Aoun, J. (1993). The syntax of doubled arguments. *Anuario del Seminario de Filología Vasca "Julio de Urquijo"*, 27(3):709–730.
- Aoun, J. (1999). Clitic-doubled arguments. In *Beyond principles and parameters*, pages 13–42. Springer.
- Aoun, J. and Benmamoun, E. (1998). Minimality, reconstruction, and movement. *Linguistic Inquiry*, 29(4):569–597.

- Aoun, J. and Choueiri, L. (2000). Epithets. *Natural Language & Linguistic Theory*, 18(1):1–39.
- Aoun, J., Choueiri, L., and Hornstein, N. (2001). Resumption, movement, and derivational economy. *Linguistic inquiry*, 32(3):371–403.
- Aoun, J. and Li, Y.-h. A. (2003). *Essays on the representational and derivational nature of grammar: The diversity of wh-constructions*. MIT press.
- Aoun, J. E., Benmamoun, E., and Choueiri, L. (2010). *The syntax of Arabic*. Cambridge University Press.
- Arregi, K. (2003). Clitic left dislocation is contrastive topicalization. *University of Pennsylvania Working Papers in Linguistics*, 9(1):4.
- Arregi, K. (2010). Ellipsis in split questions. *Natural Language & Linguistic Theory*, 28(3):539–592.
- Ayoub, G. (1981). Structure de la phrase verbale en Arabe Standard. *Etudes Arabes Saint-Denis*, 1(2):1–367.
- Baker, M. C. (1996). *The polysynthesis parameter*. Oxford University Press.
- Baker, M. C. (2008). *The syntax of agreement and concord*, volume 115. Cambridge University Press.
- Bakir, M. (2011). Against the split-cp hypothesis. *Perspectives on Arabic Linguistics XXII–XXIII*, pages 187–202.
- Bakir, M. J. (1980). Aspects of clause structure in Arabic: A study in word order variation in literary arabic. *Doctoral dissertation, University of Indiana-Bloomington*.
- Banfield, A. (1973). Narrative style and the grammar of direct and indirect speech. *Foundations of language*, 10(1):1–39.
- Barbiers, S., Koenenman, O., and Lekakou, M. (2010). Syntactic doubling and the structure of wh-chains. *Journal of Linguistics*, 46(1):1–46.
- Barbosa, P. (2000). Clitics a window into the null subject property”. In *Portuguese Syntax*.
- Barros, M. (2014). *Sluicing and identity in ellipsis*. PhD thesis, Rutgers University.

- Barros, M., Elliott, P., and Thoms, G. (2014). There is no island repair. *Ms. Rutgers/UCL/University of Edinburgh*.
- Beaver, D. I., Roberts, C., Simons, M., and Tonhauser, J. (2017). Questions under discussion: Where information structure meets projective content. *Annual Review of Linguistics*, 3:265–284.
- Beermann, D., LeBlanc, D., and van Riemsdijk, H. (1997). *Rightward movement*, volume 17. John Benjamins Publishing.
- Belletti, A. (2001). Inversion as focalization. *Subject inversion in Romance and the theory of Universal Grammar*, 60:90.
- Benincà, P. and Munaro, N. (2011). *Mapping the Left Periphery: The Cartography of Syntactic Structures*, volume 5. Oxford University Press.
- Benmamoun, E. and Lorimor, H. (2006). Featureless expressions: When morphophonological markers are absent. *Linguistic inquiry*, 37(1):1–23.
- Biloea, E. (2013). *The syntax of Tuki: a cartographic approach*, volume 203. John Benjamins Publishing.
- Birner, B. J. and Ward, G. L. (1998). *Information status and noncanonical word order in English*, volume 40. John Benjamins Publishing.
- Bleam, T. M. (1999). *Le' ista Spanish and the Syntax of Clitic Doubling*. PhD thesis, University of Pennsylvania.
- Boeckx, C. (2003). *Islands and chains: Resumption as stranding*, volume 63. John Benjamins Publishing.
- Boeckx, C. (2008). *Aspects of the syntax of agreement*. Routledge.
- Boeckx, C. (2012). *Syntactic islands*. Cambridge University Press.
- Bolinger, D. (1989). *Intonation and its uses: Melody in grammar and discourse*. Stanford university press.
- Bolotin, N. (1997). Arabic speakers and parasitic gaps. *Amsterdam studies in the theory and history of linguistic science series 4*, pages 273–282.
- Boone, E. (2014). *The syntax and licensing of gapping and fragments*. LOT, Utrecht.
- Borer, H. (1984). *Parametric syntax: Case studies in Semitic and Romance languages*. Dordrecht: Foris.



- Bošković, Ž. (2007). On the locality and motivation of move and agree: An even more minimal theory. *Linguistic inquiry*, 38(4):589–644.
- Bouzouita, M. (2014). Left dislocation phenomena in old Spanish: An examination of their structural properties. *Linguistik Aktuell/Linguistics Today*, 214:23–52.
- Bresnan, J. and Mchombo, S. A. (1987). Topic, pronoun, and agreement in Chicheŵa. *Language*, pages 741–782.
- Brody, M. (1995). Focus and checking theory. *Approaches to Hungarian*, 5:29–44.
- Bruening, B. (2001). *Syntax at the edge: Cross-clausal phenomena and the syntax of Passamaquoddy*. PhD thesis, Massachusetts Institute of Technology.
- Brunetti, L. (2003). *A unification of focus*. PhD thesis, Università degli Studi di Firenze.
- Brunetti, L. (2004). Are there two distinct foci in Italian? *Southwest Journal of Linguistics*, 23(2):1–33.
- Büring, D. (2003). On D-trees, beans, and B-accent. *Linguistics and philosophy*, 26(5):511–545.
- Burton-Roberts, N. (1999). Language, linear precedence and parentheticals. *The clause in English*, 45:33–51.
- Cadiot, P. (1992). Matching syntax and pragmatics: a typology of topic and topic-related constructions in Spoken French. *Linguistics*, 30(1):57–88.
- Camacho, J. (2003). The coarse structure of the center periphery. *Unpublished manuscript, Rutgers University*.
- Cardinaletti, A. (2002). Against optional and null clitics. right dislocation vs. marginalization. *Studia linguistica*, 56(1):29–57.
- Cardinaletti, A. and Starke, M. (1999). The typology of structural deficiency: A case study of the three classes of pronouns. *Clitics in the languages of Europe*, 8.
- Carlson, G. and Pelletier, F. (1995). *The generic book*. University of Chicago Press.

- Carlson, L. (1982). *Dialogue games: An approach to discourse analysis*. PhD thesis, MIT.
- Carnie, A. (2011). *Syntax: A generative introduction*. Blackwell Publishing.
- Casielles, E. (2006). Big questions, small answers. *The syntax of nonsententials*, pages 117–145.
- Casielles-Suárez, E. (2004). *The syntax-information structure interface: Evidence from Spanish and English*. Routledge.
- Cecchetto, C. (1999). A comparative analysis of left and right dislocation in Romance. *Studia Linguistica*, 53(1):40–67.
- Cecchetto, C. (2000). Doubling structures and reconstruction. *Probus*, 12(1):93–126.
- Cecchetto, C. and Chierchia, G. (1999). Reconstruction in dislocation constructions and the syntax/semantics interface. In *WCCFL XVII Proceedings*, pages 132–146.
- Cecchetto, C. and Donati, C. (2015). Don't move that remnant too much! In *Remnant Movement*. Ed. by Grewendorf, G. pp. 179-200.
- Chafe, W. (1976). Givenness, contrastiveness, definiteness, topics, and point of view. *Subject and topic*.
- Chambers, A. (1998). *The chambers dictionary*. Allied Publishers.
- Chao, W. and Sells, P. (1983). On the interpretation of resumptive pronouns. In *Proceedings of NELS*, volume 13, pages 47–61.
- Chomsky, N. (1965). Aspects of the theory of syntax. *MIT Press*.
- Chomsky, N. (1971a). Deep structure, surface structure and semantic. In *D.Steinberg and L.Jacobovits (eds.) Semantics*.
- Chomsky, N. (1971b). Some empirical issues in the theory of transformational grammar. *Indiana University Linguistics Club*.
- Chomsky, N. (1976). Conditions on rules of grammar. *Linguistic analysis*, pages 303–351.
- Chomsky, N. (1977). On wh-movement. formal syntax, ed. by Peter W. Culicover, Thomas Wasow, and Adrian Akmajian, 71-132.

- Chomsky, N. (1981). Lectures on government and binding. *Dordrecht: Foris*.
- Chomsky, N. (1982). *Some concepts and consequences of the theory of government and binding*. MIT press.
- Chomsky, N. (1986). *Knowledge of language: Its nature, origin, and use*. Greenwood Publishing Group.
- Chomsky, N. (1995). *The minimalist program*. MIT press.
- Chomsky, N. (2000). Minimalist inquiries: The framework (mitopl 15). *Step by step: Essays on minimalist syntax in honor of Howard Lasnik*, pages 89–155.
- Chomsky, N. (2001). Derivation by phase. In Michael Ken-stowicz (ed.), *Ken Hale: A life in language*, 1–52. Cambridge, MA: MIT Press., pages 1–52.
- Chomsky, N. (2008). On phases. *Current Studies in Linguistics Series*, 45:133.
- Chomsky, N., Gallego, Á. J., and Ott, D. (2019). Generative grammar and the faculty of language: Insights, questions, and challenges. *Catalan Journal of Linguistics*, pages 229–261.
- Chomsky, N. and Lasnik, H. (1993). The theory of principles and parameters. *Syntax: An international handbook of contemporary research*, pages 506–569.
- Chung, S. (2006). Sluicing and the lexicon: The point of no return. In *In Proceedings of the annual meeting of the Berkeley Linguistics Society*, volume 31, pages 73–93.
- Chung, S., Ladusaw, W., and McCloskey, J. (2011). Sluicing (:) between structure and inference. *Representing language: Essays in honor of Judith Aissen*, pages 31–50.
- Cinque, G. (1977). The movement nature of left dislocation. *Linguistic inquiry*, 8(2):397–412.
- Cinque, G. (1983). Topic Constructions in Some European languages and Connectedness. . In K. Ehlich and H. Van Riemsdijk (eds.) *Connectedness in Sentence, Discourse and Text*. Tilburg Studies in Language and Literature.
- Cinque, G. (1990). *Types of  $\bar{A}$ -Dependencies*. MIT press Cambridge, MA.
- Cinque, G. (1995). *Italian syntax and universal grammar*. Cambridge University Press.

- Cinque, G. (1997). Topic constructions in some European languages and connectedness. in *Materials on Left Dislocation*.
- Cinque, G. (1999). *Adverbs and functional heads: A cross-linguistic perspective*. Oxford University Press.
- Cinque, G. and Krapova, I. (2008). Clitic reduplication constructions in Bulgarian. *Clitic Doubling in the Balkan Languages, Amsterdam, John Benjamins*, pages 257–287.
- Cinque, G. and Rizzi, L. (2009). The cartography of syntactic structures. *Oxford Handbook of linguistic analysis*.
- Cinque, G. and Rizzi, L. (2010). The cartography of syntactic structures. *Oxford Handbook of linguistic analysis*.
- Cohen, A. and Erteschik-Shir, N. (2002). Topic, focus, and the interpretation of bare plurals. *Natural Language Semantics*, 10(2):125–165.
- Constant, N. (2014). *Contrastive Topic: Meanings and Realizations*. PhD thesis, University of Massachusetts Amherst.
- Corbett, G. G. (2006). *Agreement*. Cambridge University Press.
- Cornilescu, A. and Dobrovie-Sorin, C. (2008). Clitic doubling, complex heads and interarboreal operations. *Clitic doubling in the Balkan languages*, pages 289–319.
- Cruschina, S. (2010). Syntactic extraposition and clitic resumption in Italian. *Lingua*, 120(1):50–73.
- Culicover, P. W. and Jackendoff, R. S. (2005). *Simpler syntax*. Oxford University Press.
- De Cat, C. (2002). *French dislocation*. PhD thesis, University of York.
- De Cat, C. (2004). On the impact of French subject clitics on the information structure of the sentence. In *Romance Languages and Linguistic Theory*. eds. Reineke Bok-Bennema, Bart Hollebrandse, Brigitte Kampers-Manhe, and Petra Sleeman, 33–46.
- De Cat, C. (2005). French subject clitics are not agreement markers. *Lingua*, 115(9):1195–1219.

- De Cat, C. (2007). *French dislocation: Interpretation, syntax, acquisition*. Oxford University Press.
- De Vries, M. (2007a). Dislocation and backgrounding. *Linguistics in the Netherlands*, 24(1):235–247.
- De Vries, M. (2007b). Invisible constituents? parentheses as b-merged adverbial phrases. *Parentheticals*, pages 203–234.
- De Vries, M. (2009a). The left and right periphery in Dutch. *The linguistic review*, 26(2-3):291–327.
- De Vries, M. (2009b). Specifying coordination an investigation into the syntax of dislocation, extraposition and parenthesis. In *Language and linguistics: Emerging trends*, ed. Cynthia R. Dreyer, 37–98.
- De Vries, M. (2012a). Parenthetical main clauses—or not? *On appositives and quasi-relatives. Main Clause Phenomena: New Horizons*, pages 177–201.
- De Vries, M. (2012b). Unconventional mergers. *Ways of structure building*, pages 143–166.
- De Vries, M. (2013). Locality and right-dislocation. *Linguistics in the Netherlands*, 30(1):160–172.
- Dehé, N. and Kavalova, Y. (2007). *Parentheticals*, volume 106. John Benjamins Publishing.
- Delais-Roussarie, E., Doetjes, J., Sleeman, P., et al. (2004). Dislocation. *Handbook of French semantics*, pages 501–528.
- Demirdache, H. (1991). *Resumptive chains in restrictive relatives, appositives, and dislocation structures*. PhD thesis, MIT.
- Demirdache, H. (1997). Dislocation, resumption and weakest crossover. *Materials on left dislocation*, pages 193–231.
- Demirdache, H. and Percus, O. (2011). Resumptives, movement and interpretation. *Resumptive pronouns at the interfaces*, 5:367.
- Diesing, M. (1992). *Indefinites*. MIT press.
- Dikken, M. d., Meinunger, A., and Wilder, C. (2000). Pseudoclefts and ellipsis. *Studia linguistica*, 54(1):41–89.

- Dimitrova-Vulchanova, M. and Hellan (1999). Clitics and Bulgarian clause structure. *Clitics in the languages of Europe*, pages 469–514.
- Dobrovie-Sorin, C. (1990). Clitic doubling, wh-movement, and quantification in Romanian. *Linguistic inquiry*, 21(3):351–397.
- Doron, E. (1982). On the syntax and semantics of resumptive pronouns. *Texas Linguistics Forum*, pages 1–48.
- Downing, L. J. (2011). The prosody of ‘dislocation’ in selected Bantu languages. *Lingua*, 121(5):772–786.
- Eilam, A. (2011). *Explorations in the informational component*. Doctoral Dissertation, Pennsylvania University.
- El Zarka, D. (2013). *On the interaction of information structure and prosody: the case of Egyptian Arabic*. Habilitationsschrift, Karl-Franzens-Universität Graz, Austria.
- Elbourne, P. (2001). E-type anaphora as NP-deletion. *Natural Language Semantics*, 9(3):241–288.
- Elbourne, P. D. (2005). *Situations and individuals*, volume 90. MIT press Cambridge, MA.
- Emonds, J. (2004). Unspecified categories as the key to root constructions. In *Peripheries*, pages 75–120. Springer.
- Enç, M. (1991). The semantics of specificity. *Linguistic inquiry*, pages 1–25.
- Endo, Y. (1996). On right dislocation. *MIT Working papers in Linguistics*.
- Endriss, C. (2009). Exceptional wide scope. In *Quantificational Topics*, pages 107–185. Springer.
- Engdahl, E. (1983). Parasitic gaps. *Linguistics and philosophy*, pages 5–34.
- Erteschik-Shir, N. (1997). *The dynamics of focus structure*. Cambridge University Press.
- Erteschik-Shir, N. (2007). *Information structure: The syntax-discourse interface*, volume 3. Oxford University Press.
- Erteschik-Shir, N. (2013). Information structure and (in) definiteness. In *Crosslinguistic studies on noun phrase structure and reference*, pages 23–51. Brill.

- Escobar, Á. (1995). *Left-hand satellites in Spanish*. PhD thesis, Utrecht University.
- Escobar, Á. (1997). Clitic left dislocation and other relatives. *Materials on left dislocation*, 14:233–274.
- Espinal, M. T. (1991). The representation of disjunct constituents. *Language*, pages 726–762.
- Eubank, L. (1989). Parameters in L2 learning: Flynn revisited. *Interlanguage studies bulletin (Utrecht)*, 5(1):43–73.
- Evans, G. (1980). Pronouns. *Linguistic inquiry*, 11(2):337–362.
- Fassi Fehri, A. (1993). *Issues in the structure of Arabic clauses and words*. Studies in natural language and linguistic theory.
- Fassi Fehri, A. (2012). *Key features and parameters in Arabic grammar*, volume 182. John Benjamins Publishing.
- Feldhausen, I. (2010). *Sentential form and prosodic structure of Catalan*. John Benjamins Publishing Company Amsterdam.
- Fernández, J. (2013). How left is right? locating Romance CLRD. *A Handout for a paper presented at XXIII CGG, Madrid*.
- Fernández-Sánchez, J. (2016). Topics at the left edge of infinitive clauses in Spanish and Catalan. *Borealis—An International Journal of Hispanic Linguistics*, 5(2):111–134.
- Fernández-Sánchez, J. (2017). *Right dislocation as a biclausal phenomenon: evidence from Romance languages*. PhD thesis, Universitat Autònoma de Barcelona.
- Fernández-Sánchez, J. (2020). *Right Peripheral Fragments: Right dislocation and related phenomena in Romance*, volume 258. John Benjamins Publishing Company.
- Fiengo, R. and May, R. (1994). *Indices and identity*. MIT press.
- Fominyam, H. and Šimík, R. (2017). The morphosyntax of exhaustive focus. *Natural Language & Linguistic Theory*, 35(4):1027–1077.
- Fortin, C. (2007). *Indonesian Sluicing and Verb Phrase Ellipsis: Description and Explanation in a Minimalist Framework*. PhD thesis, University of Michigan.

- Fox, D. (1999). Reconstruction, binding theory, and the interpretation of chains. *Linguistic Inquiry*, 30(2):157–196.
- Fox, D. and Sauerland, U. (1996). Illusive scope of universal quantifiers. In *NELS Proceedings*, volume 26, pages 71–86. University of Massachusetts.
- Frascarelli, M. (2000). *The syntax-phonology interface in focus and topic constructions in Italian*, volume 50. Springer Science & Business Media.
- Frascarelli, M. (2004). Dislocation, clitic resumption and minimality. In *Romance languages and linguistic theory*, pages 99–118.
- Frascarelli, M. and Hinterhölzl, R. (2007). Types of topics in German and Italian. *On information structure, meaning and form*, pages 87–116.
- Frascarelli, M. and Ramaglia, F. (2013). (pseudo) clefts at the syntax-prosody-discourse interface. In *Cleft structures*, pages 97–138. John Benjamins.
- Frey, W. (2004). Notes on the syntax and the pragmatics of German. In *Horst Lohnstein & Susanne Trissler (eds.), The syntax and semantics of the left periphery*, 9:203.
- Gary, J. O. and Gamal-Eldin, S. M. (1982). *Cairene Egyptian Colloquial Arabic*, volume 6. North-Holland.
- Gecség, Z. and Kiefer, F. (2009). A new look at information structure in Hungarian. *Natural Language & Linguistic Theory*, 27(3):583–622.
- Ginzburg, J. and Sag, I. (2000). *Interrogative investigations*. Stanford: CSLI publications.
- Givón, T. (1979). *On understanding grammar*. Academic Press.
- Grewendorf, G. (2008). The left clausal periphery: Clitic left-dislocation in Italian and left-dislocation in German. *Shaer et al. 2009*, pages 49–94.
- Griffiths, J. (2019). A Q-based approach to clausal ellipsis: Deriving the preposition stranding and island sensitivity generalisations without movement. *Glossa: a journal of general linguistics*, 4(1).
- Griffiths, J. and Lipták, A. (2014). Contrast and island sensitivity in clausal ellipsis. *Syntax*, 17(3):189–234.
- Griffiths, J. E. (2015). *On appositives*. LOT.



- Grohmann, K. K. (2000). *Prolific peripheries: A radical view from the left*. PhD thesis, University of Maryland, College Park.
- Grohmann, K. K. (2003). *Prolific domains: On the anti-locality of movement dependencies*, volume 66. John Benjamins Publishing.
- Guilliot, N. and Malkawi, N. (2007). Reconstruction without movement. *Coreference, Modality, and Focus: Studies on the Syntax-Semantics Interface*, pages 111–131.
- Gundel, J. M. (1975). *The role of topic and comment in linguistic theory*. New York: Garland.
- Gutiérrez-Rexach, J. (2000). The formal semantics of clitic doubling. *Journal of Semantics*, 16(4):315–380.
- Gutiérrez-Rexach, J. (2001). *interface conditions and the semantics/pragmatics interface*. Walter de Gruyter.
- Gutiérrez-Rexach, J. (2002). Constraint interaction at semantics/pragmatics interface. *Meaning through language contrast*, 1:335.
- Gyuris, B. (2009). *The semantics and pragmatics of the contrastive topic in Hungarian*. Lexica.
- Haegeman, L. (1991). Parenthetical adverbials: The radical orphanage approach. *Aspects of modern English linguistics*.
- Haegeman, L. (1994). *Introduction to government and binding theory*. Wiley-Blackwell.
- Hall, A. (2019). Fragments. *The Oxford Handbook of Ellipsis*.
- Halliday, M. A. (1967). Notes on transitivity and theme in English: Part 2. *Journal of linguistics*, 3(2):199–244.
- Hamlaoui, F. and Szendroi, K. (2017). The syntax-phonology mapping of intonational phrases in complex sentences: A flexible approach. *Glossa*, 2(1).
- Hankamer, J. and Sag, I. (1976). Deep and surface anaphora. *Linguistic inquiry*, 7(3):391–428.
- Harizanov, B. (2014). Clitic doubling at the syntax-morphophonology interface. *Natural Language & Linguistic Theory*, 32(4):1033–1088.

- Haugen, J. D. (2008). *Morphology at the interfaces: Reduplication and noun incorporation in Uto-Aztecan*, volume 117. John Benjamins Publishing.
- Hawkins, J. A. (1983). *Word order universals*, volume 3. Elsevier.
- Heestand, D., Xiang, M., and Polinsky, M. (2011). Resumption still does not rescue islands. *Linguistic Inquiry*, 42(1):138–152.
- Heim, I. (1982). The semantics of definite and indefinite NPs. *University of Massachusetts at Amherst dissertation*.
- Heycock, C. (2006). Embedded root phenomena. *The Blackwell companion to syntax*, pages 174–209.
- Heycock, C. and Kroch, A. (1999). Pseudocleft connectedness: Implications for the LF interface level. *Linguistic inquiry*, 30(3):365–397.
- Higginbotham, J. (1980). Pronouns and bound variables. *Linguistic Inquiry*, 11(4):679–708.
- Hofmeister, P. and Sag, I. A. (2010). Cognitive constraints and island effects. *Language*, 86(2):366.
- Hoji, H. and Fukaya, T. (2001). On island repair and CM vs. non-CM constructions in English and Japanese. In *Handout of presentation presented at Kaken workshop on ellipsis, Kyoto*.
- Holes, C. (1990). *Gulf Arabic*. Psychology Press.
- Hornstein, N. (2001). *Move!: A minimalist theory of construal*. Blackwell Oxford.
- Hornstein, N., Nunes, J., and Grohmann, K. K. (2005). *Understanding minimalism*. Cambridge University Press.
- Horvath, J. (2000). Interfaces vs. the computational system in the syntax of focus. In *In Interface strategies*, pages 183–206. Amsterdam: Royal Netherlands Academy of Arts and Sciences.
- Horvath, J. (2010). “discourse features”, syntactic displacement and the status of contrast. *Lingua*, 120(6):1346–1369.
- Huang, C.-T. J. (1982). *Logical relations in Chinese and the theory of grammar*. PhD thesis, MIT.

- Huang, J., Li, Y.-H. A., and Li, Y. (2009). *The syntax of Chinese*. University of Cambridge Press, 10.
- Iatridou, S. (1995). Clitics and island effects. *University of Pennsylvania working papers in linguistics*, 2(1):3.
- Jaber, A. (2014). *On genericity and definiteness in Modern Standard Arabic*. PhD thesis, University of North Carolina at Chapel Hill.
- Jackendoff, R. S. (1972). *Semantic interpretation in generative grammar*. The MIT Press.
- Janse, M. (2008). Clitic doubling from Ancient to Asia Minor Greek. *Clitic doubling in the Balkan languages*, pages 165–202.
- Johannessen, J. B. (1996). Partial agreement and coordination. *Linguistic Inquiry*, pages 661–676.
- Johnson, K. (2019). Gapping and stripping. *The Oxford Handbook of Ellipsis*.
- Kallulli, D. (2000). Direct object clitic doubling in Albanian and Greek. *Clitic phenomena in European languages*, pages 209–248.
- Kayne, R. (1994). *The Antisymmetry of Syntax*, volume 25. MIT press.
- Kayne, R. S. (1975). *French syntax: The transformational cycle*, volume 30. MIT press Cambridge, MA.
- Kayne, R. S. (2000). On the left edge in UG: A reply to McCloskey. *Syntax*, 3(1):44–51.
- Kechagias, A. (2011). *Regulating word order in modern Greek: verb initial and non-verb initial orders & the conceptual-intentional interface*. PhD thesis, UCL (University College London).
- Kenesei, I. (1986). On the logic of word order in Hungarian. *In Topic, focus, and configurationality*, pages 143–159.
- Kennedy, C. and Merchant, J. (2000). Attributive comparative deletion. *Natural Language & Linguistic Theory*, 18(1):89–146.
- Kim, S. (2001). Chain composition and uniformity. *Natural Language & Linguistic Theory*, 19(1):67–107.

- Kim, S. K. (2015). *Speech, Variation, and Meaning: The Effects of Emotional Prosody on Word Recognition*. PhD thesis, Stanford University.
- Kimura, H. (2010). A wh-in-situ strategy for sluicing. *English Linguistics*, 27(1):43–59.
- Kiss, K. and Gyuris, B. (2003). Apparent scope inversion under the rise fall contour. *Acta Linguistica Hungarica*, 50(3-4):371–404.
- Kiss, K. É. (1998). Identificational focus versus information focus. *Language*, 74(2):245–273.
- Kluck, M., Ott, D., and De Vries, M. (2015). *Parenthesis and ellipsis: cross-linguistic and theoretical perspectives*, volume 121. Walter de Gruyter GmbH & Co KG.
- Koopman, H. and Sportiche, D. (1983). Variables and the bijection principle. *The Linguistic Review*, 2(2):139–160.
- Koster, J. (2000). Extraposition as parallel construal. Ms., University of Groningen.
- Kramer, R. (2014). Clitic doubling or object agreement: The view from Amharic. *Natural Language & Linguistic Theory*, 32(2):593–634.
- Krifka, M. (2008). Basic notions of information structure. *Acta Linguistica Hungarica*, 55(3-4):243–276.
- Krifka, M. (2011). Questions. In von Heusinger, K. *Semantics. An international handbook of natural language meaning*. Berlin: Mouton de Gruyter, 2pp, pages 1742–1785.
- Krifka, M. and Musan, R. (2012). Information structure: Overview and linguistic issues. *The expression of information structure*, 5:1–44.
- Kruijff-Korbayová, I. and Steedman, M. (2003). Discourse and information structure. *Journal of logic, language and information*, 12(3):249–259.
- Kuno, S. (1978). *Danwa no Bunpoo*. Tokyo: Taishuukan.
- Kupula Ross, M. (2012). Clitic left dislocation as agreement–A movement approach. [https://ling.auf.net/lingbuzz/001494/current.pdf?\\_s=y4zyHFmtydDazzYg](https://ling.auf.net/lingbuzz/001494/current.pdf?_s=y4zyHFmtydDazzYg).

- Kural, M. (1997). Postverbal constituents in Turkish and the linear correspondence axiom. *Linguistic inquiry*, pages 498–519.
- Laca, B. (1990). Generic objects: some more pieces of the puzzle. *Lingua*, 81(1):25–46.
- Lahne, A. (2005). Die linke satzperipherie im okzitanischen. Master's thesis, University of Jena.
- Laka, I. (1990). *Negation in syntax—on the nature of functional categories and projections*. PhD thesis, Massachusetts Institute of Technology.
- Lalami, L. (1996). Clitic left dislocation in Moroccan Arabic. *Amsterdam Studies in the Theory and History of Linguistic Science Series 4*, pages 115–130.
- Lambrecht, K. (1988). Presentational cleft constructions in Spoken French. *Clause combining in grammar and discourse*, pages 135–179.
- Lambrecht, K. (1994). *Information structure and sentence form: Topic, focus, and the mental representations of discourse referents*, volume 71. Cambridge university press.
- Lambrecht, K. (2001). Dislocation. *Language typology language universals: An international handbook*, 2:1050–1078.
- Langacker, R. (1969). On pronominalization and the chain of command. *Modern studies in English*, ed. by David A. Reibel and Sanford A. Schane, 160–86.
- Larson, R. K. (1988). On the double object construction. *Linguistic inquiry*, 19(3):335–391.
- Larsson, E. (1979). La dislocation en français. etude de syntaxe générative.
- Lasnik, H. (2001). When can you save a structure by destroying it? In *NELS Proceedings*, pages 301–320.
- Lasnik, H. (2003). *Minimalist investigations in linguistic theory*. Routledge.
- Lasnik, H. and Saito, M. (1984). On the nature of proper government. 235–289. *Linguistic Inquiry*.
- Lasnik, H. and Saito, M. (1992). *Move  $\alpha$* . Cambridge, Mass.: MIT Press.
- Lasnik, H. and Stowell, T. (1991). Weakest crossover. *Linguistic inquiry*, 22(4):687–720.

- Law, A. (2003). Right dislocation in Cantonese as a focus-marking device. *University College London Working Papers in Linguistics*, 15:243–275.
- Lebeaux, D. (1988). *Language acquisition of the form of grammar*. PhD thesis, Umass University.
- Lechner, W. (2004). *Ellipsis in comparatives*, volume 72. Walter de Gruyter.
- Legate, J. A. (2002). *Warlpiri: theoretical implications*. PhD thesis, Massachusetts Institute of Technology.
- Leonetti, M. (2007). Clitics do not encode specificity. In *Proceedings of the workshop Definiteness, specificity and animacy in Ibero-Romance languages*, pages 111–139.
- Leonetti, M. (2008). Specificity in clitic doubling and in differential object marking. *Probus*, 20(1):33–66.
- Leonetti, M. (2013). On contrastive readings in the interpretation of NPs/DPs. *Arbeitspapier Nr. 127*, page 99.
- Leung, T. (2014). The preposition stranding generalization and conditions on sluicing: Evidence from Emirati Arabic. *Linguistic Inquiry*, 45(2):332–340.
- Lin, J. (2005). Does wh-in-situ license parasitic gaps? *Linguistic Inquiry*, 36(2):298–302.
- Lobeck, A. (1995). *Ellipsis: Functional heads, licensing, and identification*. Oxford University Press.
- López, L. (2009). *A derivational syntax for information structure*, volume 23. Oxford University Press.
- López, L. (2016). Dislocations and information structure. In *The Oxford handbook of information structure*.
- Lüdeling, A., Ritz, J., Stede, M., and Zeldes, A. (2016). Corpus linguistics and information structure research. *The Oxford Handbook of Information Structure*, Oxford University Press. URL <http://www.oxfordhandbooks.com/10.1093/oxfordhb/9780199642670.001, 1>.
- Lyassi, N. (2012). Standard Arabic Left-dislocation without Movement: Evidence for the presence of a Hanging Topic Left-dislocation Construction. *International Journal of Linguistics*, 4(4):590.

- Manzini, M. R. (1994). Syntactic dependencies and their properties: a note on strong islands. *UCL Working Papers in Linguistics*, 6:205–218.
- Marantz, A. (1984). *On the Nature of Grammatical Relations*. MIT Press, Cambridge.
- McCawley, J. D. (1970). English as a VSO language. *Language*, pages 286–299.
- McCawley, J. D. (1993). Gapping with shared operators. In *Annual Meeting of the Berkeley Linguistics Society*, volume 19, pages 245–253.
- McCloskey, J. (1990). Resumptive pronouns,  $\bar{A}$ -binding, and levels of representation in Irish. In *The syntax of the modern Celtic languages*, pages 199–248. Brill.
- McCloskey, J. (1999). On the right edge in Irish. *Syntax*, 2(3):189–209.
- McCloskey, J. (2006). Resumption. *The Blackwell companion to syntax*, pages 94–117.
- McNally, L. (1998). On recent formal analyses of topic. In *The Tbilisi symposium on language, logic, and computation: Selected papers*, volume 14, pages 147–160. Stanford, CA: CSLI Publications.
- Merchant, J. (2001). *The syntax of silence: Sluicing, islands, and the theory of ellipsis*. Oxford University Press.
- Merchant, J. (2004a). Fragments and ellipsis. *Linguistics and philosophy*, 27(6):661–738.
- Merchant, J. (2004b). Resumptivity and non-movement. *Studies in Greek linguistics*, 24:471–481.
- Merchant, J. (2006). Small clauses: A sententialist perspective. in *Progovac et al. 2006*, pages 73–91.
- Merchant, J. (2019). Ellipsis: A survey of analytical approaches. In *The Oxford handbook of ellipsis*.
- Michelle, G. and Michaelis, L. (2001). Topicalization and left-dislocation: a functional opposition revisited. *Journal of Pragmatics*, 33(11):1665–1706.
- Mithun, M. (1992). Is basic word order universal. *Pragmatics of word order flexibility*, 22:15–61.

- Miyagawa, S. (2010). *Why agree? Why move? Unifying agreement-based and discourse configurational languages*. MIT Press.
- Molnár, V. (2002). Contrast—from a contrastive perspective. In *Information structure in a cross-linguistic perspective*, pages 147–161. Brill Rodopi.
- Morgan, J. (1973). Sentence fragments and the notion ‘sentence’. *Issues in linguistics: Papers in honor of Henry and Renée Kahane*, pages 719–751.
- Moutaouakil, A. (1989). *Pragmatic functions in a functional grammar of Arabic*. Walter de Gruyter GmbH & Co KG.
- Müller, G. (1995). *A-bar syntax: A study in movement types*. Walter de Gruyter.
- Murphy, A. (2016). Subset relations in ellipsis licensing. *Glossa*, 1(1):1.
- Murphy, A. (2017). Toward a unified theory of wh-in-situ and islands. *Journal of East Asian Linguistics*, 26(2):189–231.
- Musabhien, M. (2008). *Case, agreement and movement in Arabic: a minimalist approach*. PhD thesis, Newcastle University.
- Neeleman, A. and Szendrői, K. (2004). Superman sentences. *Linguistic Inquiry*, 35(1):149–159.
- Neeleman, A., Titov, E., Van de Koot, H., and Vermeulen, R. (2009). A syntactic typology of topic, focus and contrast. *Alternatives to cartography*, 1551.
- Nespor, M. and Vogel, I. (1986). *Prosodic phonology*. Dordrecht: Foris.
- Newmeyer, F. J. (2009). On split CPs and the ‘perfectness’ of language. In *Dislocated elements in discourse*, pages 122–148. Routledge.
- Nissenbaum, J. (2000). Covert movement and parasitic gaps. In *PROCEEDINGS-NELS*, volume 30, pages 541–556.
- Nolda, A. (2004). Topics detached to the left: On ‘left dislocation’, ‘hanging topic’, and related constructions in German. In *ZAS Papers in Linguistics*, volume 35, pages 423–448.
- Nunes, J. (2004). *Linearization of chains and sideward movement*, volume 43. MIT press.
- Nykiel, J. (2013). Clefts and preposition omission under sluicing. *Lingua*, 123:74–117.



- Obiedat, N. (1994). *The presentation of thematic structure in the translation of English and Arabic political discourse*. PhD thesis, Durham University.
- Onea, E. (2016). *Potential questions at the semantics-pragmatics interface*. Brill.
- Ordóñez, F. and Treviño, E. (1999). Left dislocated subjects and the pro-drop parameter: A case study of Spanish. *Lingua*, 107(1-2):39–68.
- Osman, M. H. (1990). Bound anaphora in Egyptian Arabic. *Perspectives on Arabic Linguistics I*, pages 155–173.
- Ott, D. (2014). An ellipsis approach to contrastive left-dislocation. *Linguistic Inquiry*, 45(2):269–303.
- Ott, D. (2015). Connectivity in left-dislocation and the composition of the left periphery. *Linguistic Variation*, 15(2):225–290.
- Ott, D. (2016a). Do fragments need to move? In *A handout for a paper presented in Syn/Sem Reading Group. University of Ottawa. 25/11/2016*, pages 1–10.
- Ott, D. (2016b). Ellipsis in appositives. *Glossa: a journal of general linguistics*, 1(1):34.
- Ott, D. (2017). The syntax and pragmatics of dislocation: A non-templatic approach. In *Proceedings of the 2017 CLA Conference. Toronto: Ryerson University*.
- Ott, D. and De Vries, M. (2012). Thinking in the right direction: An ellipsis analysis of right-dislocation. *Linguistics in the Netherlands*, 29(1):123–134.
- Ott, D. and De Vries, M. (2014). A biclausal analysis of right-dislocation. In *Proceedings of NELS*, volume 43, pages 41–54.
- Ott, D. and De Vries, M. (2016). Right-dislocation as deletion. *Natural Language & Linguistic Theory*, 34(2):641–690.
- Ott, D. and Onea, E. (2015). On the form and meaning of appositives. In *Proceedings of NELS*, volume 45, pages 203–212.
- Ott, D. and Struckmeier, V. (2016). Deletion in clausal ellipsis: remnants in the middle field. In *Proceedings of the 39th Annual Penn Linguistics Conference*, volume 22, pages 225–234.

- Ott, D. and Struckmeier, V. (2017). Constraints on clausal ellipsis are pragmatic, not syntactic. [https://cla-acl.artsci.utoronto.ca/wp-content/uploads/resumes-2017-abstracts/ACL\\_CLA\\_2017\\_abstract\\_56\\_Ott\\_Struckmeier.pdf](https://cla-acl.artsci.utoronto.ca/wp-content/uploads/resumes-2017-abstracts/ACL_CLA_2017_abstract_56_Ott_Struckmeier.pdf).
- Ott, D. and Struckmeier, V. (2018). Particales and deletion. *Linguistic inquiry*, 49(2):393–407.
- Ouhalla, J. (1994a). Focus in Standard Arabic. *Linguistics in Potsdam*, 1:65–92.
- Ouhalla, J. (1994b). Verb movement and word order in Arabic. In *Verb movement*, 41:72.
- Ouhalla, J. (1997). Remarks on focus in Standard Arabic. *Amsterdam Studies in the Theory AND History OF Linguistic Science Series 4*, pages 9–46.
- Ouhalla, J. and Shlonsky, U. (2002). *Themes in Arabic and Hebrew syntax*, volume 53. Springer Science & Business Media.
- Owens, J. (1990). *Early Arabic Grammatical Theory-Studies in the History of the Language Sciences*. Amsterdam-Philadelphia.
- Pablos, L. (2006). *Pre-verbal structure building in Romance languages and Basque*. Doctoral Dissertation, University of Maryland.
- Park, M. K. and Kim, S. W. (2009). The syntax of afterthoughts in Korean: Move and delete. *The linguistic Association of Korea Journal*, 17(4):25–53.
- Payne, D. L. (1992). *Pragmatics of word order flexibility*, volume 22. John Benjamins Publishing.
- Pereltsvaig, A. (2004). Topic and focus as linear notions: evidence from Italian and Russian. *Lingua*, 114(3):325–344.
- Pesetsky, D. (1987). Wh-in-situ: Movement and unselective binding. *The representation of (in) definiteness*, 98:98–129.
- Philippaki-Warbuton, I. (1987). The theory of empty categories and the pro-drop parameter in Modern Greek. *Journal of linguistics*, 23(2):289–318.
- Philippaki-Warbuton, I., Varlokosta, S., Georgiafentis, M., and Kotzoglou, G. (2004). Moving from theta-positions: pronominal clitic doubling in Greek. *Lingua*, 114(8):963–989.

- Philippova, T. (2014). P-omission under sluicing,[P clitic] and the nature of P-stranding. *Proceedings of ConSOLE XXII. Leiden University Centre for Linguistics, Leiden.*
- Poletto, C. and Pollock, J.-Y. (2004). On the left periphery of some Romance wh-questions. *The structure of CP and IP. The cartography of syntactic structures*, 2:251–296.
- Polinsky, M. (1999). A review of information structure and sentence form: Topic, focus, and the mental representations of discourse referents. *language*, 75(4):567–582.
- Polinsky, M. and Potsdam, E. (2001). Long-distance agreement and topic in Tsez. *Natural Language & Linguistic Theory*, 19(3):583–646.
- Pollock, J.-Y. (1989). Verb movement, universal grammar, and the structure of IP. *Linguistic inquiry*, 20(3):365–424.
- Popper, K. (1959). *The logic of scientific discovery*. Basic Books. New York.
- Portner, P. and Yabushita, K. (1998). The semantics and pragmatics of topic phrases. *Linguistics and Philosophy*, pages 117–157.
- Postal, P. (1966). On so-called pronouns in English. In *Nineteenth Monograph on Languages and Linguistics*, Georgetown University Press, Washington, D.C.
- Postal, P. (1971). *Crossover phenomena*. New York: Rinehart and Winston.
- Postal, P. M. (1993). Remarks on weak crossover effects. *Linguistic Inquiry*, 24(3):539–556.
- Preminger, O. (2009). Breaking agreements: Distinguishing agreement and clitic doubling by their failures. *Linguistic Inquiry*, 40(4):619–666.
- Preminger, O. (2011). *Agreement as a fallible operation*. PhD thesis, Massachusetts Institute of Technology.
- Prince, E. F. (1981). Topicalization, focus-movement, and yiddish-movement: A pragmatic differentiation. In *Annual meeting of the berkeley linguistics society*, volume 7, pages 249–264.
- Prince, E. F. (1998). On the limits of syntax, with reference to left-dislocation and topicalization. In *The limits of syntax*, pages 281–302. Brill.

- Progovac, L. (2006). The syntax of nonsententials: Small clauses and phrases at the root. *The syntax of nonsententials: Multidisciplinary perspectives*, pages 33–71.
- Reeve, M. (2016). Fragments, truncated clefts and island-sensitivity. In *Ellipsis Across Borders Conference 2016*, pages 1–10.
- Reich, I. (2007). Toward a uniform analysis of short answers and gapping. *On information structure, meaning and form*, pages 467–484.
- Reinhart, T. (1981). Pragmatics and linguistics: An analysis of sentence topics in pragmatics and philosophy i. *Philosophica anc Studia Philosophica Gandensia Gent*, 27(1):53–94.
- Reinhart, T. (1983). *Anaphora and semantic interpretation*. Routledge.
- Reinhart, T. (1991). Elliptic conjunctions—non-quantificational LF. In *The Chomskyan Turn*, edited by A. Kasher, 360—384.
- Repp, S. (2010). Defining ‘contrast’ as an information-structural notion in grammar. *Lingua*, 6(120):1333–1345.
- Rezac, M. (2010). the  $\phi$ -agree versus the  $\phi$ -feature movement: Evidence from floating quantifiers. *Linguistic Inquiry*, 41(3):496–508.
- Richards, N. (2014). A-bar movement. *The Routledge handbook of syntax*, pages 167–191.
- Rizzi, L. (1982). *Issues in Italian syntax*, volume 11. Dordrecht,Foris.
- Rizzi, L. (1986). On the status of subject clitics in Romance. *Studies in Romance linguistics*, pages 391–419.
- Rizzi, L. (1990). *Relativized minimality*. The MIT Press.
- Rizzi, L. (1991). Residual V2 and the WH-criterion. *ms. Université de Genève*.
- Rizzi, L. (1997). The fine structure of the left periphery. In *Elements of grammar*, pages 281–337. Springer.
- Rizzi, L. (2001). Relativized minimality effects. *The handbook of contemporary syntactic theory*, 4:89–110.
- Rizzi, L. (2004). Locality and left periphery. *Structures and beyond: The cartography of syntactic structures*, 3:223–251.

- Roberts, C. (1996/2012). Information structure: Towards an integrated formal theory of pragmatics. *Semantics and Pragmatics*, 5:6–1.
- Rochemont, M. S. (1986). *Focus in generative grammar*. J. Benjamins Publishing Company.
- Rooth, M. (1992). A theory of focus interpretation. *Natural language semantics*, 1(1):75–116.
- Rooth, M. (2005). Topic accents on quantifiers. *Reference and quantification: The Partee effect*, page 303.
- Ross, J. (1969). Guess who. In *5th Annual Meeting of the Chicago Linguistic Society (CLS 5)*, pages 252–286.
- Ross, J. R. (1967). *Constraints on variables in syntax*. Doctoral Dissertation, MIT.
- Rouveret, A. (2002). How are resumptive pronouns linked to the periphery? *Linguistic variation yearbook*, 2(1):123–184.
- Rubio Alcalá, C. (2014). *Syntactic constraints on topicalization phenomena*. PhD thesis, Universitat Autònoma de Barcelona,.
- Ryding, K. C. (2005). *A reference grammar of modern standard Arabic*. Cambridge university press.
- Safir, K. (1984). Multiple variable binding. *Linguistic Inquiry*, pages 603–638.
- Safir, K. (1999). Vehicle change and reconstruction in  $\bar{A}$ -chains. *Linguistic inquiry*, 30(4):587–620.
- Safir, K. (2017). Weak crossover. *The Wiley Blackwell Companion to Syntax, Second Edition*, pages 1–40.
- Sailor, C. and Thoms, G. (2014). On the non-existence of non-constituent coordination and non-constituent ellipsis. In *Proceedings of WCCFL*, volume 31, pages 361–370. Citeseer.
- Sainsbury, R. M. (2009). *Paradoxes*. Cambridge University Press.
- Salzmann, M. (2006). *Resumptive prolepsis: A study in indirect A'-dependencies*. LOT, Utrecht.

- Salzmann, M. (2017). *Reconstruction and Resumption in Indirect A'-Dependencies: On the Syntax of Prolepsis and Relativization in (Swiss) German and Beyond*, volume 117. Walter de Gruyter GmbH & Co KG.
- Samek-Lodovici, V. (2006). When right dislocation meets the left-periphery.: A unified analysis of Italian non-final focus. *Lingua*, 116(6):836–873.
- Samek-Lodovici, V. (2015). *The interaction of focus, givenness, and prosody: A study of Italian clause structure*, volume 57. OUP Oxford.
- Schlenker, P. (2003). Clausal equations (a note on the connectivity problem). *Natural Language & Linguistic Theory*, 21(1):157–214.
- Schmerling, S. F. (1976). *Aspects of English sentence stress*. University of Texas Press.
- Schneider-Zioga, P. (1994). *The syntax of clitic doubling in Modern Greek*. PhD thesis, University of Southern California.
- Schütze, C. T. (2001). On the nature of default case. *Syntax*, 4(3):205–238.
- Selkirk, E. (2005). Comments on intonational phrasing in english. *Prosodies: With special reference to Iberian languages*, 9:11–58.
- Selkirk, E. (2011). The syntax-phonology interface. *The handbook of phonological theory*, page 435.
- Sells, P. (1984). *Syntax and semantics of resumptive pronouns*. PhD thesis, MIT.
- Shaer, B., Cook, P., Frey, W., and Maienborn, C. (2009). *Dislocated elements in discourse: Syntactic, semantic, and pragmatic perspectives*. Routledge.
- Shaer, B. and Frey, W. (2004). 'integrated' and 'non-integrated' left-peripheral elements in German and English. In Benjamin Shaer, Werner Frey, & Claudia Maienborn (eds.), *Proceedings of the dislocated elements workshop*, 465–502.
- Sharvit, Y. (1999). Resumptive pronouns in relative clauses. *Natural Language & Linguistic Theory*, 17(3):587–612.
- Shin, J.-Y. (2005). Wh-constructions in Korean: A lexical account. *Toronto Working Papers in Linguistics*, 25.
- Shlonsky, U. (1992). Resumptive pronouns as a last resort. *Linguistic inquiry*, 23(3):443–468.

- Shlonsky, U. (1997). *Clause structure and word order in Hebrew and Arabic: An essay in comparative Semitic syntax*. Oxford University Press.
- Shlonsky, U. (2000). Remarks on the complementizer layer of Standard Arabic. In *Research in Afroasiatic Grammar: Papers from the Third conference on Afroasiatic Languages, Sophia Antipolis, 1996*, volume 202, page 325. John Benjamins Publishing.
- Soltan, U. (2007). *On formal feature licensing in minimalism: Aspects of Standard Arabic morphosyntax*. PhD thesis, University of Maryland.
- Soltan, U. M. (1996). A contrastive and comparative syntactic analysis of deletion phenomena in English and Standard Arabic. *Unpublished MA Dissertation*. Ain Shams University.
- Spportiche, D. (1992). Clitics, voice, and spec-head licensing. *Glow Newsletter*, 28:46–47.
- Spportiche, D. (1996). Clitic constructions. In *Phrase structure and the lexicon*, pages 213–276. Springer.
- Stainton, R. J. (1998). Quantifier phrases, meaningfulness in isolation, and ellipsis. *Linguistics and Philosophy*, pages 311–340.
- Stainton, R. J. (2005). In defense of non-sentential assertion. *Semantics versus pragmatics*, pages 383–457.
- Stalnaker, R. C. (1978). Assertion. In *Pragmatics*, pages 315–332. Brill.
- Starke, M. (2001). *Move Dissolves into Merge: a Theory of Locality*. PhD thesis, Université de Genève.
- Sturgeon, A. (2008). *The Left Periphery: The interaction of syntax, pragmatics and prosody in Czech*, volume 129. John Benjamins Publishing.
- Suñer, M. (1982). *Syntax and semantics of Spanish presentational sentence-types*. Georgetown Univ School of Language.
- Suñer, M. (1988). The role of agreement in clitic-doubled constructions. *Natural Language & Linguistic Theory*, 6(3):391–434.
- Suñer, M. (2006). Left dislocations with and without epithets. *Probus*, 18(1):127–158.

- Svenonius, P. (1998). Clefts in Scandinavian: an investigation. *ZAS Papers in Linguistics*, 10:163–190.
- Szabolcsi, A. (1994). All quantifiers are not equal: The case of focus. *Acta Linguistica Hungarica*, 42(3/4):171–187.
- Takita, K. (2014). Pseudo-right dislocation, the bare-topic construction, and hanging topic constructions. *Lingua*, 140:137–157.
- Tanaka, H. (2001). Right-dislocation as scrambling. *Journal of Linguistics*, 37(3):551–579.
- Tancredi, C. (1992). *Deletion, deaccenting and presupposition*. PhD thesis, MIT.
- Taraldsen, K. T. (1986). Som and the binding theory. In *Topics in Scandinavian syntax*, pages 149–184. Springer.
- Tellier, C. (1989). Head-internal relatives and parasitic gaps in Mooré. *Current approaches to african linguistics*, 6:298–318.
- Thoms, G. (2010). ‘Verb floating’ and VP-ellipsis: Towards a movement account of ellipsis licensing. *Linguistic variation yearbook*, 10(1):252–297.
- Thráinsson, H. (2007). *The syntax of Icelandic*. Cambridge University Press.
- Tomioka, S. (2007). Pragmatics of LF: Japanese and Korean wh-interrogatives. *Journal of Pragmatics*, 39(9):1570–1590.
- Truckenbrodt, H. (2015). Intonation phrases and speech acts. *Parenthesis and ellipsis: Cross-linguistic and theoretical perspectives*, pages 301–349.
- Truswell, R. (2011). *Events, phrases, and questions*. Oxford University Press.
- Tsimpli, I.-M. (1992). Focussing in modern Greek. ms. *University College, London*.
- Tsimpli, I.-M. (1995). Focusing in modern Greek. *Discourse configurational languages*, 176:206.
- Uriagereka, J. (1995). Aspects of the syntax of clitic placement in Western Romance. *Linguistic inquiry*, 26(1):79–123.
- Vallduví, E. (1990). *The informational component*. Doctoral dissertation, University of Pennsylvania.



- Vallduví, E. (1992). *The informational component*. New York:Garlnad Pub.
- Valmala, V. (2007). The syntax of little things. In *17th colloquium on generative grammar, girona*.
- Van Craenenbroeck, J. (2009). *Alternatives to cartography*, volume 100. Walter de Gruyter.
- Van Craenenbroeck, J. (2010). *The syntax of ellipsis: Evidence from Dutch dialects*. Oxford University Press.
- Van Craenenbroeck, J. and Merchant, J. (2013). Ellipsis phenomena. *Cambridge handbook of generative syntax*, pages 701–745.
- Van Craenenbroeck, J. and Temmerman, T. (2019). *The Oxford handbook of ellipsis*. Oxford University Press.
- Van Riemsdijk, H. (1997). Left dislocation. In *Materials on left dislocation*, pages 1–10.
- Vat, J. (1983). Left dislocation, connectedness, and reconstruction. *On the Formal Syntax of the Westgermania: Papers from the 3rd Groningen Grammar Talks (3e Groninger Grammatikgespräche)*, Groningen, January 1981, 3:133.
- Vat, J. (1997). 'left dislocation connectedness and reconstruction. *Materials on left dislocation*, 14:67.
- Versteegh, C. H. M. and Eid, M. (2005). *Encyclopedia of Arabic Language and Linguistics*. Brill.
- Vicente, L. (2019). Sluicing and its subtypes. *The Oxford Handbook of Ellipsis*.
- Villa-García, J. (2015). *The syntax of multiple-que sentences in Spanish: Along the left periphery*, volume 2. John Benjamins Publishing Company.
- Villalba, X. (2000). *The syntax of sentence periphery*. PhD thesis, Universitat Autònoma de Barcelona,.
- Von Stechow, A. (1981). Topic, focus and local relevance. In *Crossing the boundaries in linguistics*, pages 95–130. Springer.
- Wahba, W. B. (1995). Parasitic gaps in Arabic. In *Perspectives on Arabic Linguistics VII: Papers from the Seventh Annual Symposium on Arabic Linguistics*. Amsterdam: John Benjamins, pages 59–68.

- Ward, G. L. and Prince, E. F. (1991). On the topicalization of indefinite nps. *Journal of Pragmatics*, 16(2):167–177.
- Wasow, T. (1972). *Anaphoric relations in English*. PhD thesis, MIT.
- Weir, A. (2014). *Fragments and clausal ellipsis*. PhD thesis, University of Massachusetts-Amherst.
- Williams, E. (1997). Blocking and anaphora. *Linguistic inquiry*, pages 577–628.
- Williams, E. S. (1977). Discourse and logical form. *Linguistic inquiry*, pages 101–139.
- Yim, C. (2013). Bi-clausal evidence for right dislocation in Korean. *Studies in Generative Grammar*, 17(4):25–39.
- Yuan, B. and Dugarova, E. (2012). Wh-topicalization at the syntax-discourse interface in English speakers L2 Chinese grammars. *Studies in Second Language Acquisition*, 34(4):533–560.
- Zeller, J. (2004). Left dislocation in Zulu. *Universitätsbibliothek Johann Christian Senckenberg*.
- Zeller, J. K. (2005). On clitic left dislocation in Zulu. *Rudiger Koppe Verlag*.
- Zribi-Hertz, A. (1994). The syntax of nominative clitics in Standard and Advanced French. *Paths towards universal grammar*, pages 453–472.
- Zubizarreta, M. L. (1998). *Prosody, focus, and word order*. MIT Press.
- Zwart, J.-W. (2001). Backgrounding (‘right-dislocation’) in Dutch. *Ms., University of Groningen*.